

# 2004 BUDGET



#### Managing through the Drought

As Colorado suffered through the drought of 2003, Denver Water, serving more than 1 million people in the City and County of Denver and its surrounding suburbs, was a leader in setting not only goals, but also examples, for managing through the drought.

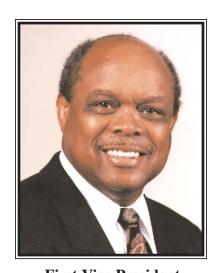
Denver Water's xeriscape at its demonstration garden at the Administration Building, 1600 W. 12th Ave., proved that drought-resistant planting can be both practical, and beautiful, and a water-wise way to complement any residential or commercial setting.

Xeriscape comes from a combination of two words: "xeri," from the Greek word "xeros," for dry; and "scape," meaning a view or scene. In practice, xeriscaping means landscaping with slow-growing, drought-tolerant plants to conserve water and reduce yard trimmings. A properly-designed xeriscape is lush, colorful and easy to care for.

This photograph, taken in June 2003 during the height of the drought, shows that xeriscaping is a beautiful alternative to expansive, turf grass lawns and traditional, and more thirsty, flowers and shrubs.

Through conservation efforts of its customers, along with strategic water restrictions and surcharges for overusage of water, Denver Water saw a 24 percent reduction in water usage, managing through the drought during the summer of 2003.

## Denver Board of Water Commissioners



First Vice President William R. Roberts Marketing Director of Empire Construction Services



President
Denise S. Maes
Attorney:
Berenbaum, Weinshienk, and Eason



Richard A. Kirk
Chairman,
Richard A. Kirk & Associates

#### MANAGER AND STAFF

Hamlet J. "Chips" Barry, Manager
Marie Bassett, Director of Public Affairs
Jon L. Diebel, Director of Engineering
Edward E. Pokorney, Director of Planning
Patricia Wells, General Counsel
David B. LaFrance, Director of Finance
Stephen W. Work, Director of Operations & Maintenance

#### QUESTIONS?

#### Who to Contact:

#### MANAGER AND STAFF:

H. J. "Chips" Barry, Manager 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6500

Marie Bassett, Director of Public Affairs 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6656

Patricia L. Wells, Director of Legal 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6464

David B. LaFrance, Director of Finance 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6411

Jon L. Diebel, Director of Engineering 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6611

Edward E. Pokorney, Director of Planning 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6506

Stephen W. Work, Director of Operations & Maintenance 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6503

### DENVER BOARD OF WATER COMMISSIONERS:

#### Denise S. Maes, President

Attorney
Berenbaum, Weinshenk & Eason
370 – 17<sup>th</sup> St.
Suite 4800
Denver, CO. 80202
(303) 825-0800
dmaes@bw-legal.com

#### William R. Roberts, First Vice-President

Marketing Director
Empire Construction Services
4095 Jackson Street
Denver, CO. 80216
303-399-1002
empire.construction@empcon.com

#### Richard A. Kirk, Vice-President\*\*

Chairman Richard A. Kirk & Associates 333 Logan St., Ste. 230 Denver, CO. 80203 (303) 863-0659 sbehr63331@aol.com

#### George B. Beardsley, Vice-President

Land Developer Inverness Properties 2 Inverness Dr. E Suite 200 Denver, CO. 80112 (303) 799-9595 X374 gbeardsley@invernessproperties.com.

Mr. Beardsley was appointed on January 29, 2004

#### **Questions concerning the 2004 Budget Document - Contact:**

Ronald M. Duncan, Manager, Fiscal Planning & Performance 1600 W. 12th Avenue Denver, CO. 80204-3412 Ph: (303) 628-6412

Fax: (303) 628-6483

ron.duncan@denverwater.org

\*\*Budget Committee



Chips Barry, Manager

March 3, 2004

Board of Water Commissioners City and County of Denver Denver, Colorado 80204-3412

Re: Denver Water 2004 Budget

To Our Customers and Interested Readers:

On December 17, 2003, the Board of Water Commissioners adopted Denver Water's 2004 budget. This budget reflects our two principal commitments to our customers: to provide an adequate and reliable supply of high-quality water and to develop additional supplies for the future.

Our primary activity in 2003 was responding to the continued effects of the worst drought in Colorado's history.

The year 2003 began in much the same way that the previous one ended: snow pack and reservoir levels were still low; water-use restrictions were still in effect; and a surcharge on water consumption to support water-saving incentives was still in place.

As the year unfolded, we closely monitored snow pack and reservoir levels to assess drought conditions and coordinate our response. We also looked for new opportunities to conserve water and increase its supply. At the same time, we worked to sustain and build awareness of the drought among our customers, promote the need for conservation, and look for new ways to increase water supplies.

In the spring, a combination of heavy snowstorms and conservation efforts helped raise snow pack and reservoir levels, yet both remained below normal. In June, the Board instituted a higher summertime surcharge for excess water use. It phased out the surcharge by the end of July when reservoir levels reached 80 percent of capacity.

Despite the complexities of managing in a drought, we kept a series of significant capital construction projects on schedule; in fact, we accelerated the timetable for construction of the Moffat Collection System project, Recycled Water Plant and several other projects to help ensure as predictable a water supply as possible.

In addition, we continued the restoration of more than 7,000 acres of our property near the Cheesman Reservoir that were burned by the Hayman Fire in 2002. We also engaged in a number of capacity-planning, conservation, and efficiency efforts that will ultimately improve our ability to serve an increasing customer base more reliably and efficiently.

As Denver Water looks to the year ahead, we do so with caution. In December, reservoir levels stood at 75 percent, approximately 10 percent below normal expectations. However, December 2003 reservoir levels were more than 25 percent above those for December 2002. Because drought is part of the natural weather cycle of Colorado, we will continue to monitor snow pack and reservoir conditions, encourage voluntary conservation, implement water restrictions as needed, and take the steps necessary to manage and maintain an adequate and reliable water supply for our customers.

#### **Capital Construction**

Despite the demands of the drought, Denver Water kept a significant number of major capital projects on track, including:

- Recycled Water Plant. Construction continued on the first phase of two phases for the Recycled Water Plant. When the first phase is online in the spring of 2004, the plant will produce 30 million gallons of recycled water a day for use by irrigation and industrial customers located primarily in the north and central sections of Denver.
  - The projected construction cost of the first phase of this project is \$72 million as of December 31, 2003. The plant is scheduled to begin operation in the spring of 2004.
- <u>Marston Treatment Plant Upgrades</u>. Over the last 3 years, Denver Water has made a number of significant upgrades and improvements at the Marston Treatment Plant to improve water quality and water production efficiency and increase treatment capacity.
- <u>Slurry Wall for Metro Area Gravel Pits.</u> Over the last four years, Denver Water has acquired a number of gravel pits in the Denver metro area. These pits will capture water that would otherwise flow through the metro area and make additional water available to the Denver system through exchange with other water-right holders.
  - In 2003, Denver Water engaged in the first significant construction project related to capturing the water in gravel pits, building a slurry wall around the Hazeltine, Road Runners' Rest II, and Brinkmann-Woodward reservoirs. When complete, the wall will enable the pit to store up to 18,000 acre feet of water, without a hydrologic connection to the South Platte River.
- Gross Dam Hydroelectric Project. Under a license from the Federal Energy Regulatory Commission, Denver Water is constructing a hydropower facility at Gross Dam. When online, the dam will be a clean source of energy that will help offset the utility's energy costs in its operations. It will generate 7.4 megawatts, or 25 million kilowatt hours of electricity.
  - In 2003, Denver Water initiated two significant projects related to the hydropower facility. The first was an upstream slide gate at Gross Dam to enable shutoff of water to the outlet works and allow for construction of a diversion to the powerhouse. Working around the clock, dive teams labored for 51 days at 7,280 feet above sea level to install the 49 square-foot, 30,000-pound gate at a depth of 290 feet below the surface of the water. The gate installation was completed in November.

The second significant project will be the installation of two turbines and generators at Gross Dam. The Board authorized the installation of this equipment in October. Installation is expected to begin in the summer of 2004.

The hydropower facility is projected to come online in the fall of 2005.

#### 2004 Goals and Objectives

Denver Water's goals and objectives are driven by our Strategic and Integrated Resource Plans. These plans have helped the utility achieve many goals over the last ten years. Seven important goals for 2004 are:

#### Manage Water Supplies and Drought Preparation

During the first quarter of 2004, we will closely monitor the winter snow pack, which will help us predict the anticipated runoff and reservoir inflow for the year. We will also spend the first quarter preparing our 2004 demand-management response which will be needed if the reservoirs do not fill adequately. The 2004 demand-management response, along with a planned formal update of our Drought Response Plan, will benefit from our 2003 experiences as well as the results of a broad survey of customers taken in 2003 as to the effectiveness of our drought-management practices.

#### Begin Recycled Water Service

We will begin serving select irrigation and industrial customers with recycled water in the spring of 2004. The Recycled Water Plant has been under construction for three years and will ultimately supply 45 million gallons of non-potable water per day. The project is an important part of Denver Water's efforts to use its water resources efficiently.

#### Continue Restoration of Watersheds Damaged by Wildfires

Major efforts were made in 2003 to rehabilitate and protect watershed areas that were damaged by wildfires in 2002. These efforts included using hay bales and log sediment barriers to stem erosion, reseeding, aerial polymer spraying to help break up soil made hydrophobic by the heat of the fire, mulching burned trees to put more nutrients into the soil, clearing and salvaging damaged trees, and planting new trees. Federal grants helped offset some of the costs associated with these efforts. Our habitat-restoration work will continue in 2004 and will include construction of two more large in-stream sediment traps to prevent sediment inflow into the Cheesman Reservoir.

#### Improve Customer Service through Technology Advancements

To enhance its customer service and create even greater operational efficiencies, Denver Water began investigating the deployment of a new customer information and billing system (CIS) in 2002. In 2003, the utility selected a vendor to begin installing the system. In 2004, Denver Water plans to install the new system and migrate from a 15-year-old legacy system.

For customers, the CIS system will provide several key benefits. It will enable the utility to move from a bimonthly to a monthly billing which will allow customers to monitor their water-consumption habits more closely, spot leaks or over-utilization, and see and respond to the effects of drought-related billing surcharges more immediately.

For Denver Water, a new CIS system will increase the flexibility of programming options for implementing water rates and drought surcharges. It will also improve the ability to print customized messages on the bills of target customer groups, communicating important information to them more easily.

The transition to the new CIS system is anticipated to take 15 months; the system is scheduled to come online in 2005.

#### **Operational Improvements**

We will continue with the rollout of our automated meter reading project which will allow us to read more than 200,000 customer water meters electronically. The year 2004 will be the fourth year of a five-year program. This project, which utilizes radio-frequency technology, will give Denver Water the ability to efficiently and automatically read meters every month, and will eventually reduce total Denver Water meter reading-related staff by 30 employees.

#### Future Water Supply Planning

In 2004, we will continue to work on various methods for adding the water supply needed to serve our growing customer base. In 2003, we began preparing an environmental impact statement ("EIS") for the Moffat Collection System Project. The EIS is the first step in a process to seek authorization from the U.S. Corps of Engineers for the construction of the project. When approved and constructed, the project will provide 18,000 acre-feet of new water to the Moffat Treatment Plant, and will help meet projected near-term demand for treated water. It will also reduce vulnerability, reliability, and flexibility problems related to the utility's water delivery which can, in part, be attributed to insufficient water supplies available to the Moffat plant.

In 2004, we will continue working through the National Environmental Policy Act (EIS) process to gain permits for this north end supply effort. The project evaluation and selection process will continue throughout 2004 with the Board expected to select a preferred option in early 2005. A draft EIS is also expected to be published in early 2005.

#### National and Regional Issues

In 2004, we will continue to monitor a variety of regional and national issues that have the potential to affect Denver Water's operation and water supply. These issues include but are not necessarily limited to developments on the Colorado River, the impact of the Endangered Species Protection Program on the South Platte River below Denver, and a significant case now before the Supreme Court related to the Clean Water Act (S. Fla. Water Mgt. Dist. v. Miccosukee Tribe). We remain committed to protecting our assets from any adverse outcomes so that we may continue to provide a reliable supply of high-quality water to our customers.

#### **2003 Budget Performance**

#### Receipts

Denver Water's 2003 receipts totaled \$312.7 million, which was \$77.8 million more than budgeted. Bond Proceeds were \$92.0 million more than budgeted as a result of taking advantage of favorable interest rates. Sale of water to customers was \$2.0 million less than budgeted due to drought demand reductions. Drought and Tap Surcharges were down \$3.0 million and \$2.9 million, respectively as a result of eliminating surcharges when reservoir levels reached 80%. Land sales were \$4.9 million less than expected due to sales that were anticipated for 2003 that have been deferred to 2004. System Development Charges were down \$4.1 million.

Receipts from the sale of water are Denver Water's largest source of funds. In 2003, these sales were \$131.0 million. This revenue was \$2.0 million (1.5%) less than the budget due to water restrictions as a result of the drought.

The drought and tap surcharges went into effect September 18, 2002 and continued until the summer of 2003. This encouraged conservation and resulted in receipts of \$8.0 million and \$1.6 million, respectively in 2003. The demand surcharge phase-out and tap surcharge removal was announced on June 25 as reservoir levels had reached 80%.

In 2003, a total of \$2.1 million was received from the Natural Resources Conservation Services grant and \$173,000 from the Environmental Protection Agency, Section 319 Grant to help mitigate the costs of repairing the landscape around Cheesman Reservoir damaged as a result of the June 2002 Hayman fire.

Debt Proceeds totaled \$132.4 million in 2003. Denver Water sold its first issue of revenue bonds in May. The \$50.0 million of bonds, which were sold at a premium, generated proceeds of \$51.3 million. The proceeds were allocated to capital improvements at the Marston and Foothills Treatment Plants. An additional \$77.155 million in revenue bonds were sold in September, also at a premium, to generate \$81.1 million in proceeds. Of this amount, \$46.6 million was used to refund outstanding general obligation bonds; the remainder was allocated to the construction of the Recycled Water Plant.

In 2003, System Development Charge (SDC) receipts were \$19.6 million, \$4.1 million less than budgeted.

Cash receipts from the investment portfolio totaled \$4.9 million.

#### Operation and Maintenance

In 2003, Operation and Maintenance expenditures of \$105.5 million exceeded the budget by \$8.4 million (8.7%). This variance was primarily due to \$1.2 million for higher than expected Workers' Compensation as a result of an experience audit by the insurance carrier, \$1.1 million for the Defined Benefit Retirement Plan due to actuarial requirements and the down-turn in investment performance. Water treatment chemicals and related expenditures were \$1.0 million more than expected. Unbudgeted drought related water treatment costs paid to Centennial Water & Sanitation District totaled \$605,000, Drought response and rebate expenditures exceeded the budget by \$708,000 and \$653,000, respectively.

#### Capital Expenditures

In 2003, Capital Expenditures of \$129.0 million were \$5.6 million (4.5%) more than budgeted. This was substantially due to unbudgeted expenditures of \$3.5 million for construction of a slurry wall around the Hazeltine, Road Runners' Rest II and Brinkman-Woodward gravel pits. The Automated Meter Reading Project ended the year ahead of the budgeted schedule, resulting in an overrun of \$3.1 million. The new Customer Information System (CIS) was \$1.1 million less than budgeted due to a later start in 2003 than anticipated.

#### Debt Service

Debt Service, Related Costs and Interest on Reserve Funds of \$71.3 million was \$37.7 million greater than expected due to the unbudgeted refunding of G.O. Bonds in September. As a result of favorable market conditions, Denver Water opted to refund \$35.8 million of G.O. Bonds with revenue bonds. This refunding included paying \$37.7 million in debt service for the refunded bonds. The refunding is estimated to save Denver Water \$3.0 million over the life of the new bonds.

#### Number of Employees

The number of actual regular employees at the end of 2003 was 1,042, approximately the same as 1990. The number of customers increased by 18.5% during the same period.

#### Payroll and Benefits

Payroll expenses in 2003 were \$59.5 million; \$337,000 (0.6%) more than budgeted. Employee benefit plan expenditures were \$27.1 million; \$3.2 million (13.4%) more than budgeted substantially due to increases for the Defined Benefit Retirement Plan, Workers' Compensation and health care.

#### <u>Designated Balance</u>

For year-end 2003, the Designated Ending Balance of \$163.4 million was \$26.1 million more than budgeted. This increase was substantially due to \$92.0 million more than budgeted for debt proceeds, partially offset by \$4.9 million less for land sales that were deferred to 2004, and System Development Charges that were \$4.1 million less than expected. Unbudgeted debt retirement due to refunding was \$37.7 million. Workers' Compensation and Defined Benefit Retirement Plan payments exceeded the budget by \$1.2 million and \$1.1 million, respectively. Water treatment expenditures were \$1.0 million more than anticipated, unbudgeted gravel pit slurry wall construction totaled \$3.3 million and the Automated Meter Reading Project was ahead of the budgeted schedule resulting in a \$3.1 million overrun.

The 2003 Designated Ending Balance is allocated as follows: Operation and Maintenance in the amount of \$28.6 million, Non-Expansion Capital in the amount of \$14.5 million, Debt Service reserves of \$38.1 million, Self Insurance reserves of \$7.9 million, Future Capital projects of \$62.4 million, drought-related conservation and tap surcharges totaling \$9.6 million and Hayman Fire Repair grants of \$2.3 million.

#### 2004 Budget

#### Receipts

Denver Water's receipts for 2004 are budgeted to be \$209.9 million. Operating receipts are \$26.4 million more than for 2003 at \$157.4 million. These receipts are primarily composed of revenues from the sale of water and are approximately 75% of total receipts from all sources. The projected water sales revenue is based on a 5.4% rate increase which takes effect January 1, 2004, including an anticipated 5% reduction in normal annual demand as a result of continuing customer conservation in response to drought conditions during 2002 and 2003.

System Development Charges (SDCs) are expected to total \$22.0 million in 2004, up \$2.4 million from actual 2003. The increase reflects a conservative estimate of tap sales for 2004 given current economic conditions. Proceeds from Debt financing budgeted for 2004 are \$9.0 million.

Expected receipts from investments are \$4.3 million.

#### Operation and Maintenance

Operation and Maintenance expenditures for 2004 are budgeted at \$103.6 million, \$1.9 million (1.8%) less than actually spent in 2003. Included in the 2004 Budget are \$2.9 million for operation and maintenance of the new Recycled Water Plant scheduled to go on line in the spring of 2004, drought response expenditures including a \$400,000 contract for cloud seeding-related activity, \$71,000 for Hayman fire related repair work at Cheesman Reservoir, hiring of new employees, and small standard wage adjustments.

#### Capital Expenditures

The 2004 Capital Expenditure budget is \$86.1 million, \$42.9 million less than Denver Water spent in 2003. The decrease is substantially due to completion of the new Recycled Water Plant and Distribution System going on line in the spring of 2004 (\$36.9 million less than in 2003), winding down of construction for Marston Treatment Plant improvements (\$9.5 million less than in 2003), Automated Meter Reading Project (\$4.4 million less than in 2003), and gravel pit storage construction (\$3.8 million less than in 2003). Partially offsetting these projects are expenditures for transmission and distribution system replacements and improvements (\$6.2 million more than in 2003) and capitalized computer systems and equipment including the new Customer Information System (CIS) (\$5.7 million more than in 2003).

Major 2004 capital projects include completion of the first phase of the Recycled Water Plant and Distribution System of \$16.3 million, Automated Meter Reading project of \$10.1 million, capitalized computer systems and equipment totaling \$9.6 million, of which \$3.0 million is for the new Customer Information System (CIS). Drought response related capital construction for 2004 totals \$4.9 million. Hayman fire-related construction on Turkey Creek to control the flow of sedimentation into Cheesman Reservoir is budgeted at \$658,000.

#### Number of Employees

The net number of authorized regular full-time employees is projected to increase by eight (0.7%) to 1,095 in 2004. Operation and Maintenance Division is adding a new T & D crew of six as a response to increased work loads, a journeyman assistant in the Metal Shop, and a water system operator. Public Affairs Division is deleting seven meter reading positions due to the Automated Meter Reading Project; adding one customer service field representative for water audits; and three customer service specialists for adding new customers, AMR project, monthly billing, and call center. Manager and Staff Division is adding a human resource specialist to work with the Human

Resources' computer system and automation of employee evaluations. Finance Division is adding a new accountant to help with plant analysis workload. The remaining position is due to changes in employee status from part-time to full-time.

#### Payroll and Benefits

Budgeted payroll for 2004 is \$63.7 million, \$4.2 million more than the actual for 2003. The budget includes hiring new employees, filling vacant positions, and the budgeted pay increase average of 2.3%.

Employee benefit plan costs are budgeted at \$26.5 million for 2004, a decrease of \$668,000 (2.5%) from 2003. The decrease is substantially due to anticipated lower Workers' Compensation cost of \$596,000. Board's payment for the Defined Benefit Retirement Plan is expected to be \$448,000 less than actual payments in 2003. These decreases are partially offset by increases in health insurance of \$290,000 due to rising medical costs.

#### Debt Service

Debt Service costs for 2004 are budgeted at \$38.1 million for principal and interest. Related income on debt service reserve funds are expected to reduce Denver Water expenditures to \$37.9 million.

#### **Designated Balance**

The Designated Ending Balance for 2004 is estimated to decrease by \$17.7 million to \$145.7 million. This reduction is substantially due to planned uses of the funds for capital projects.

The 2004 Designated Ending Balance is allocated as follows: Operation and Maintenance in the amount of \$29.0 million, Non-Expansion Capital in the amount of \$15.1 million, Debt Service principal and interest of \$42.4 million, Self Insurance reserves of \$8.2 million, and Future Capital projects of \$51.0 million.

#### **Financial Overview**

Denver Water's financial status is strong and is projected to continue to be so over our planning horizon of 10 years. The underlying ratings by Moody's, Fitch Ratings, and Standard and Poor's of our revenue bonds are Aa3, AA+, and AA, respectively. We will continue to monitor capital expenditures, water rates, debt levels, and designated balances to minimize rate increases or unanticipated large fluctuations in water rates. Designated balances are projected to meet or exceed targeted levels. Over the next 10 years, financial indicators for Denver Water are projected to remain strong and within conservative and prudent limits.

I am confident, as outlined in this letter, that this budget provides a responsible plan for physical and financial operations and the development of the Denver Water system in the next year.

Sincerely.

H. J. Barry Manager

### **Table of Contents**

Manager's Message	I
Mission, Values and Goals of Denver Water	1
Charter Directives	
Mission	
Organizational Values	
Strategic Plan Vision for 2005	
Integrated Resource Plan	
Integrated Resource Plan Projects	
Financial Policies	
Basis of Accounting and Financial Reporting	6
Annual Budget	
Revenues	
Expenditures	7
Balanced Budget	
Long Term Financial Plans	7
The Budget Process	8
Overview	8
Long Range Planning	8
Annual Work Plan Budgets	8
Annual Budget Preparation	8
Budget Basis	9
Budget Schedule	9
Budgeting Units	9
Amending the Budget	9
Budget Presentation and Approval	9
IRP, 2003 Long Range Plans, 2004 Budget Process and Rates Adjustment Schedule	10
Distinguished Budget Presentation Award	
Budget Controls and Updates	
Financial Structure	
How to Read the 2004 Budget	13
From Summary to Detail	13
Section 1 - 2004 Budget Summary	15
2004 Beginning Balance	15
Receipts	15
Expenditures	15
2004 Ending Balance	15
2004 Number of Employees	
The Budget at A Glance 2001 - 2004	
Summary of 2003 - 2004 Receipts and Expenditures	
Crosswalk of 2004 Budgeted Receipts to Related Capital and Operating Expenditures	
Drought, Rebate, Fire and Normal Operations Sources and Uses 2002 - 2004	
2004 Receipt and Expenditure Graphs	21

### **Table of Contents**

2004 Program Budget Expenditure Graphs	22
Customers Served Per Regular Employee 1995 - 2004	23
Denver Water - A Condensed History	24
2002 - 2003 Drought and Financial Timeline	26
The Denver Water Service Area, Population & Demand	
Denver Water Distributor Contract Service Areas	28
Treated Water Population and Demand Graphs 1920 - 2002	29
Denver Water - Water Collection System Map	30
Statistical Summary 1997 - 2002	
Customer Service Data 1997 - 2002	32
Denver Facts (Winter 2002 - 2003)	33
Denver Facts (Winter 2002 - 2003)	
Section 2 - Receipts	35
Receipts Summary	
Comparison of Receipts 2001 - 2004	
Comparison of Operating and Non-Operating Receipts 2001 - 2004	
2004 Billed Operating Revenues and Number of Customers Graphs	
Water Rates	
Types of Service	
Residential Bimonthly Billings	
2003 Water Consumption and Largest Customers	
Survey of Comparative Water Bills	
System Development Charges and Participation Receipts	45
History of System Development Charge Increases and Water Rate Structure	
System Development Charge Schedule	46
Drought and Tap Surcharges for 2002 & 2003	48
Section 3 - Expenditures By Program	51
Program Summary	51
Operation and Maintenance	
Major Capital Project Impact on Operations	
Capital	
Capital Financing	
Major 2004 Capital Projects	
Program Budget Expenditures Summary	56
Program Expenditures Summary 2001 - 2004	57
Raw Water Program	58
Program: Raw Water 2001 - 2004	59
Recycled Water Program	60
Program: Recycled Water 2001 - 2004	61
Water Treatment Program	62
Program: Water Treatment 2001 - 2004	63
Delivery Program	64
Program: Delivery 2001 - 2004	65

### **Table of Contents**

General Plant Program	66
Program: General Plant 2001 - 2004	
Supporting Activities	68
Section 4 - Expenditures by Type of Expenditure	69
Type of Expenditure Summary	
Comparison of Expenditures by Type of Expenditure 2001 - 2004	
Section 5 - Organization	
Regular and Introductory Employees by Division	73
2004 Budgeted Table of Organization	
2004 - 2003 Budgeted Table of Organization Changes	76
2004 Denver Water Table of Organization	77
Manager and Staff Division Summary	78
Public Affairs Division Summary	79
Legal Division Summary	80
Finance Division Summary	81
Engineering Division Summary	82
Planning Division Summary	83
Operations and Maintenance Division Summary	84
Divisional Reconciliation to Summary Totals	85
Denver Water Key Performance Measures	86
Section 6 – Debt Service and Obligations under Capital Leases	89
Introduction	89
Denver Water Debt Guidelines	89
Outstanding Debt and Obligations under Capital Leases	91
Payment Schedule	91
Calculation of Ratios / Schedule of Payments	92
Schedule of Outstanding Bonds and Obligations Under Capital Leases	93
Section 7 - Designated Balance	97
Designated Balance Summary	97
Comparison of Receipts and Expenditures 2001 - 2004	98
2001 - 2004 Receipts, Expenditures and Designated Balance Graphs	99
Section 8 - Glossary of Terms	101
Acronyms	
Definitions	
Fiscal Planning & Performance Staff, Divisional Budget Coordinators and Others	109

#### Mission, Values and Goals of Denver Water

#### **Charter Directives**

Denver Water was established in 1918 by the people of Denver as an independent agency with duties and responsibilities specifically spelled out in the City Charter. Since that time, the Denver Board of Water Commissioners has supplied water to Denver and contract distributors adjacent to Denver in accordance with the following charter directives: (See service area map on page 27).

The Board shall "... have complete charge and control of a water works system and plant for supplying the City and County of Denver and its inhabitants with water for all uses and purposes." Charter of the City and County of Denver, Section 10.1.1.

The Board shall fix rates which ".... shall be as low as good service will permit .. "and" .. may be sufficient to pay for operation, maintenance, reserves, debt service, additions, extensions, betterments, including those reasonably required for the anticipated growth of the Denver Metropolitan area and to provide for Denver's general welfare." Charter of the City and County of Denver, Section 10.1.9.

#### **Mission**

Denver Water will provide our customers with high quality water and excellent service through responsible and creative stewardship of the assets we manage. We will do this with a productive and diverse work force. We will actively participate in and be a responsible member of the water community.

#### **Organizational Values**

Our values describe the guiding principles and beliefs governing how all employees of Denver Water are expected to meet their responsibilities in carrying out the mission of the organization. These values provide the framework for effectively reaching decisions and guiding future actions within the Department.

- •We exist for the purpose of serving our customers.
- •We value our heritage of providing a high quality product and excellent service at a reasonable cost.
- •We strive to be responsible and accountable stewards in our use of public land and water, and environmental and financial resources.
- •We value a work force that reflects the diversity of the community we serve.
- •We expect accountability from Management in accomplishing the goals of the organization.
- •We manage water supply based on a long-term perspective on water issues.
- •We strive to show respect and courtesy in our relationships with others.
- •We want to be progressive, creative and open to new ideas and technologies to meet the challenges of the future.
- •We value the safety of our customers and the public.
- •We promote the highest level of health and safety for our employees.
- •We value our employees and enlist their contributions in operating, planning and policy matters.
- •We encourage employees' management of their career development.

#### **Strategic Plan Vision for 2005**

The Strategic Plan is the basis for setting priorities and determining Denver Water's future direction. The current Strategic Plan was revised in the spring of 1997.

#### Leadership

- •We will maintain the Denver Water system as one of the best in the country.
- •We will respect the natural environment.
- •We will be a leader in water conservation.
- •We will participate and provide leadership in all major Front Range water supply and water quality issues.
- •We will encourage and create cooperative projects with others.
- •We will possess credibility and influence with public, regulatory community, media and decision-makers at all levels of government.

#### **Products & Services**

- •We will provide drinking water that is always safe and meets our customers' expectations of quality and reliability.
- •Our customers will be pleased with our service, responsiveness and courtesy.
- •Our customers will believe that they receive high value for the cost of their water.
- •Our facilities will be well-maintained, running efficiently and reliably.
- •We will provide non-potable water for irrigation and industrial purposes.
- •We will take increasing advantage of technology to meet our goals.
- •We will anticipate new markets in order to provide ancillary products and services.
- •We will accommodate the recreational interests of the public, where practicable.

#### Organization

- •We will recognize and value the contributions of employees at every level.
- •We will remain a municipal organization that serves an increasing customer base without significant increases in numbers of employees.
- •Our Management and Staff will be worthy of the Board's trust and confidence.
- •Our entire organization will work diligently as a team, committed to the goals of the organization.
- •Our organizational culture will encourage open communication, creativity, risk taking and learning at all levels for the continual improvement of our products and services.
- •Our organization will accommodate a changing work force, including differing technological skills, languages, backgrounds and family demands.
- •Our employees and distributors will take pride in the professionalism of Denver Water.
- •We will emphasize the safety and health of employees.
- •All of our employees will be familiar with events and procedures at Denver Water and will be able to explain them to others.
- •All of our employees will possess the skills and accept the responsibility to manage their own careers.

#### **Integrated Resource Plan**

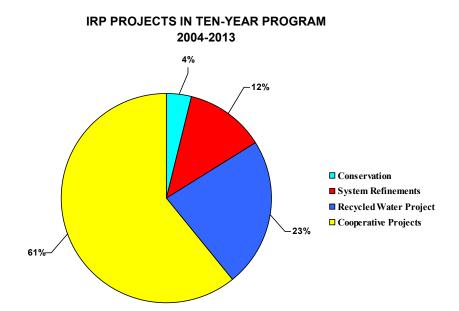
In addition to meeting existing customers' needs today, Denver Water must also plan for and meet future customer needs. For that reason, Denver Water conducts a continual and dynamic Integrated Resource Planning (IRP) process. Based on that process, the Board issued a Resource Statement in 1996 to define how Denver Water expects to meet future customers' needs. In 2001, Denver Water staff provided the Board with a status report on staff's efforts to implement the 1996 Resource Statement.

Results of the IRP indicate that additional water supply, water reuse, and/or demand management will be required after 2016. By 2050 (Near Term), Denver Water will need an additional 75,000 acre-feet of water over existing supplies to meet customer demand assuming the Board maintains the full 30,000 acre feet of safety factor. The Board's Resource Statement mapped out a near term strategy that emphasizes aggressive conservation, non-potable reuse, and low cost system refinements as the first means of meeting demand beyond 2016. The initial implementation of that strategy is expressed in the Board's current Ten-Year Program as presented below.

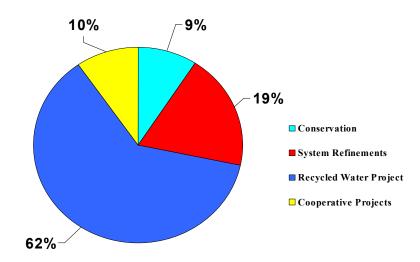
#### TEN YEAR PLAN (to 2013) vs. NEAR TERM (to 2050)



The continuity of 2004 Annual Budget expenditures with the Ten Year IRP implementation Plan is presented below



#### IRP PROJECTS IN THE 2004 BUDGET



## Integrated Resource Plan Projects (Thousands of Dollars)

The table below presents 2004 Annual Budget, Ten-Year Program, and total planned expenditures by specific IRP categories and projects.

IRP Projects (Listed in IRP order*)	2004 Budget	Ten-Year Program Costs (2004-2013)	Total Project Cost	Estimated Additional Water Yield (Acre-Feet)
CONSERVATION		(2004-2013)		(Acre-reet)
Outdoor Irrigation Efficiency	\$1,114	\$4,548	\$48,200	17,700
Xeriscape – General	453	2,290	2,290	926
Xeriscape – DW Properties	541	2,400	2,400	78
Indoor Use (C/I Processes, Cooling Twrs., Washers)	303	2,430	20,575	13,750
Subtotal	\$2,411	\$11,668	\$73,465	32,454
RECYCLED WATER PROJECT	, ,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,
Recycled Water Project	\$16,306	\$70,200	\$164,000	17,660
SYSTEM REFINEMENTS				
Gravel Pit Storage	\$1,852	\$23,940	\$51,000	5,000
Central Platte Valley Parks	0	0	4,500	**
High Line Canal Water Rights	119	2,650	2,650	3,000
City Ditch Water Rights	50	420	420	**
Chatfield Pump Station	2,437	660	5,200	3,000
Lawn Irrigation Return Flows	543	1,460	2,300	500
Farnell Lane Water Rights	0	20	200	150
Meadow Creek Water Rights	0	3,330	9,000	1,200
Antero Contract Rights	98	360	3,000	414
Elk Creek Water Rights	9	10	200	60
Platte Canyon Reservoir Outlet	0	0	600	200
Marston Seepage	0	0	310	400
Willis Case Golf Course & Rocky Mtn. Park	0	3,630	3,800	305
Subtotal	\$5,108	\$36,480	\$83,180	14,229
NEW SUPPLY AND COOPERATIVE PROJECTS				
Cooperative Project Southern Tier	\$47	\$30	Unknown	Unknown
Cooperative Project Northeast Tier	66	100	Unknown	Unknown
Cooperative Project-Aurora/S.Park Alternatives	218	830	Unknown	Unknown
N. End Supply Shortage Solution (Leyden or Other)	2,262	181,980	Unknown	Unknown
Subtotal	\$2,593	\$182,940	Unknown	Unknown

GRAND TOTAL \$26,418 \$301,288 Unknown Unknown

<sup>\*</sup>Please note – the projects are categorized as they appear in the IRP and not as they are classified in the 2004 budget document.

<sup>\*\*</sup>Yields are included in the Recycled Water Project Yield.

#### **Financial Policies**

The financial policies set forth below are the basic framework for the financial management of Denver Water. The policies are intended to assist members of the Denver Board of Water Commissioners (Board) and Denver Water's staff in evaluating current activities and proposals for future programs. The policies are to be reviewed on an annual basis and modified to accommodate changing circumstances or conditions.

#### **Basis of Accounting and Financial Reporting**

- 1. The fiscal year for Denver Water shall begin on January 1 of each calendar year and will end on December 31 of the same calendar year.
- Following the conclusion of the fiscal year, the Accounting section shall publish its financial reports and a Comprehensive Annual Financial Report (CAFR) prepared in accordance with generally accepted accounting and financial reporting principles established by the Governmental Accounting Standards Board.
- 3. The CAFR shall include the audited financial statements, including the opinion of the independent certified public accountants.
- 4. The Accounting section shall, each quarter, analyze and issue quarterly reports comparing financial results for the quarter and year to date with the same periods for the prior years.
- 5. Fixed asset records shall be maintained that provide sufficient detail information for monitoring, management and periodic inventorying of its facilities, land and water rights.

#### **Annual Budget**

- 1. Denver Water's Manager and Staff will prepare the annual budget in the context of a long-term financial plan.
- 2. The Board shall, at its option, appoint one or more of its members to a budget review committee to meet with the Manager and Directors to review and provide guidance for the Long Range Plans and Annual Budget.
- 3. The Fiscal Planning and Performance (FP&P) Section, prior to the end of December each year, shall submit to the Board the annual budget covering the next fiscal year. The budget shall contain the following information:
  - a. A letter from the Manager discussing the proposed financial plan for the next fiscal year, a review of the previous year's activities and the current financial condition of Denver Water.
  - b. Proposed capital, operation and maintenance and debt service expenditures by program and type of expenditure for the budget year, along with comparisons to estimated expenditures for the current year and actual expenditures for two prior years.
  - c. Proposed receipts, by source, for the budget year, along with comparisons to estimated receipts for the current year and actual receipts for three prior years.
  - d. Debt policies and a comparison of actual ratios to target ratios.
  - e. A table of organization with proposed staffing levels by division and section, along with comparisons to staffing levels for the current year.
  - f. A summary of designated balances for system operations normal replacements and improvements, debt service, self-insurance and future capital projects.
- 4. At least one public Board meeting shall be conducted prior to adoption of the budget.
- 5. The Board shall review the budget, making any additions or deletions they feel appropriate, and shall, prior to the end of the year, adopt the budget by quorum. If the Board fails to adopt the budget, Denver Water shall continue to operate with specific instructions from the Board regarding debt service, system operations and capital expenditures.

- 6. On final adoption, the budget shall be in effect for the budget year. It shall guide the activities of the Manager and Staff for the budget year.
- 7. The annual budget document shall be published in conformance with the Government Finance Officers Association's Distinguished Budget Program criteria. The final budget document shall be published no later than 90 days following the date the Board adopts the budget.
- 8. The Fiscal Planning and Performance section shall monitor and report to the Manager and Staff the actual receipts and expenditures and shall compare them to budgeted receipts and expenditures on a monthly and year-to-date basis.

#### Revenues

- 1. Denver Water will set rates and fees at a level that recovers the projected full cost of providing service pursuant to the City Charter.
- 2. Under certain circumstances, such as during times of drought, a temporary rate, charge, fee or surcharge may be adopted to support the Board's short term goals, meet unanticipated costs, supplement lost revenues and when deemed necessary, enforce other short term or temporary needs.
- 3. The collection and use of temporary or unpredictable revenue sources shall not be relied upon to provide for ongoing capital or operation and maintenance activities.

#### **Expenditures**

- 1. In planning expenditures, Denver Water will follow the City Charter's mandate to keep rates as low as good service will permit. In general this means that Denver Water will properly maintain its facilities and continuously seek ways to operate more efficiently.
- 2. Debt policies are provided in Section 6 Debt Service, beginning on page 89.

#### **Balanced Budget**

Denver Water balances its budget by the planned use of designated balances. The designated balances are maintained to provide for financial impacts to operation and maintenance, capital replacement, debt service and self insurance. This approach is in accordance with the City Charter, which allows the accumulation of funds for improvements of such magnitude that they cannot be acquired from the surplus revenues of a single year.

#### **Long Term Financial Plans**

- 1. Denver Water's Manager and Staff shall annually prepare a capital project plan that shall identify all capital improvements likely to be needed during the next ten years to satisfy projected growth in demand for water and to maintain existing capacity to provide water.
- 2. Each year the Manager and Staff will prepare a ten-year Operations and Maintenance Plan that shall identify expenses for normal operations, including significant changes to current operations and expenses arising out of planned capital projects.
- 3. Each year Denver Water will develop a ten-year Financial Plan which incorporates projected revenues and expenditures included in the Capital and Operation & Maintenance Plans. The ten-year Financial Plan shall be used to develop one or more scenarios for financing projected expenditures.
- 4. The long-term plans will incorporate the Manager and Staff's assumptions with respect to revenues, expenditures and changes to designated balances over a ten-year horizon. The assumptions will be evaluated each year as part of the long-range planning and budget development process.

#### **The Budget Process**

#### Overview

The Board's policies that guide Denver Water are the Strategic Plan and the Integrated Resource Plan. The Strategic Plan provides the overall mission, values and goals (see pages 1 - 2). The Integrated Resource Plan provides specific operational policies regarding future water demand and supply options. A summary of these policies is on pages 3 - 5. The long-range plans are the financial expressions of these governing factors over a ten-year period. The annual budget is the definition of needs and allocations of available resources to accomplish the next year of the long-range plans.

#### Long Range Planning

Denver Water maintains long-range (10 years) capital, operation and maintenance and financial plans that are updated annually. The Ten-Year Capital Plan projects additions, improvements and replacements to water system facilities, based on projected demands for water (Integrated Resource Plan), Federal and State regulations and ongoing system requirements. It is used as the basis for projecting the annual Capital Work Plan. The Ten-Year Operation and Maintenance Plan includes the ongoing costs of operating and maintaining the water system and the impact of the Ten-Year Capital Plan on operations. The financial plan projects compliance with debt covenants and the year-end total designated balances. These balances result from the application of projected receipt sources available for projected capital, operation and maintenance and debt service expenditures. Alternative financial plans that address estimated revenue shortfalls are also projected as a part of the long range planning effort.

#### **Annual Work Plan Budgets**

The detailed annual work-plan budgets for operation and maintenance activities, debt and capital projects are developed during the budget process each year. These budgets are substantially based on the budget year projections provided by the Long-range plans. These work plans itemize the cost of activities and projects within each program (See page 51 for description of programs).

#### **Annual Budget Preparation**

The annual budget is prepared on a program budget basis that follows the flow of water from the sources of raw water to customers' taps and cuts across organizational boundaries. The focus is first on what Denver Water as a whole is doing (what our resources are used for), then on organizational structure (the divisions and sections expending the resources), and then by type of expenditures (what types of resources – payroll, services, etc., are being used). The intent of this particular format is to facilitate the reader's understanding of how we are accomplishing our mission to serve our customers needs in the past, present and future.

All Cost Control Centers prepare their budgets on a capital project, operations and maintenance activity by type of expenditure by month basis. Budget development, monitoring and control reports are then available to budgeters and managers from project, Cost Control Center, and type of expenditure perspectives at summary and detail levels. The 2004 annual Capital Work Plan budget consists of 240 specific projects. The 2004 Operation and Maintenance Work Plan budget includes 175 specific activities. While some Cost Control Centers may budget to as few as four or five projects and activities, others may budget to 50 or more. This method provides the detailed "working" budget and reporting mechanism for in-house purposes.

Cost Control Centers enter their budgets into a centralized computer system. This system is able to provide budget and actual information for combinations of cost control center, master plan item (projects and activities) and types of expenditures for any month or year to date of months.

The Cost Control Center budgets are then combined to collect costs on a department-wide basis for each of the projects and activities in the work plans. The information contained in the work plans and Cost Control Center budgets is summarized in this document.

#### **Budget Basis**

The annual budget is prepared on a modified accrual basis in which expenditures are reported and budgeted "as booked." The difference between expenditures "as booked" and disbursed is then included in Supporting Activities (Operation and Maintenance) as an adjustment. The adjustment converts the budgeted expenditures to a cash basis in order to determine the ending total of designated balances for system operation and land sales account amounts for presentation purposes. This differs from the basis of accounting, which uses the full accrual method in accordance with the Generally Accepted Accounting Principles (GAAP).

#### **Budget Schedule**

The 2004 budget development schedule on page 10 shows the process from the Integrated Resource Plan to Long Range Planning process to development of the annual budget and resulting budget approval by the Board of Water Commissioners.

#### **Budgeting Units**

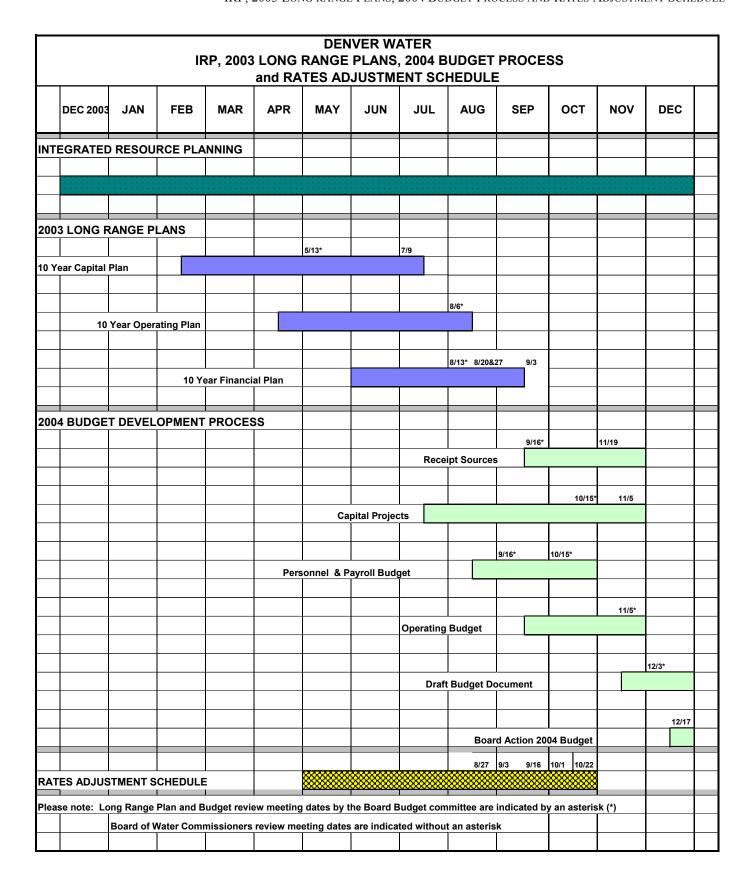
Denver Water is divided into six operating divisions totaling ninety budgeting units or cost control centers. Seventy-nine of these cost control centers are comprised of groups of employees based on organizational structure. The remaining eleven are used to budget and control office furniture and equipment, personal computers, related expenditures and adjustments.

#### Amending the Budget

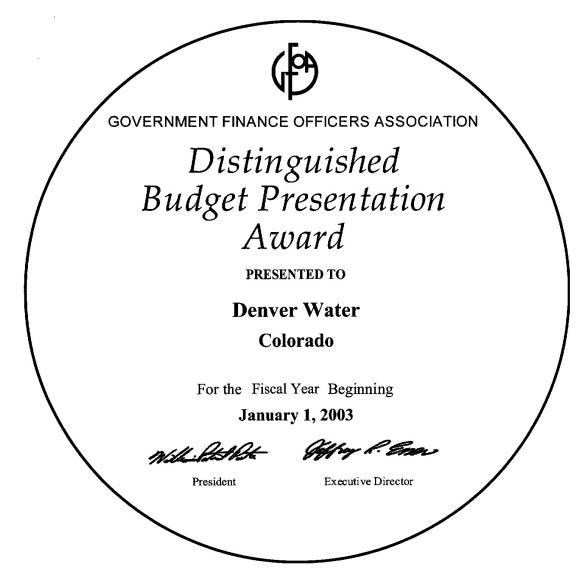
Amounts budgeted for specific projects and activities may be revised through the issuance of a special authorization. A special authorization request showing the budget code, cost control center(s) involved, reason for variance, amount of variance, revised estimate and schedule is prepared by the requesting Division. It is then approved by that Division Director and, if needed, the Manager, who will determine if Board approval is also required.

#### **Budget Presentation and Approval**

Denver Water is not required by City Charter or state law to make its draft budget available to the public prior to its adoption by the Board of Water Commissioners. The preliminary 2004 budget was reviewed by the Board's Budget Committee, presented in summary at one or more public Board meetings and presented in draft to the entire Board prior to its approval.



#### **Distinguished Budget Presentation Award**



The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award of Distinguished Budget Presentation to Denver Water, Colorado for its annual budget for the fiscal year beginning January 1, 2003. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

#### **Budget Controls and Updates**

Periodic reports are provided to the Board of Water Commissioners, Manager, Division Directors, Cost Center Managers and Budget Coordinators. Key reports include:

<u>Monthly Budget Status Summary</u> - Provided to the Board, Manager and Division Directors. Compares receipts to related capital and operating expenditures for the year-to-date and are broken down by type of expenditure. Budgeted and actual billed revenues are graphically compared to receipts from Water Sales by month-end and year to date.

<u>Monthly Budget Status Report</u> - Provides the Manager and Division Directors with graphs and summary tabulations of actual and budgeted receipts and expenditures for the month and year to date. Also included are explanations of major receipt, expenditure and designated balance variances and graphs showing each Division's budget performance. Divisional Budget Coordinators also receive this information plus a detailed Receipt and Expenditure Budget report and a Gross Payroll Budget report by Division and Cost Center.

<u>Monthly Cost Control Center Budget Report</u> - Each Cost Control Center is provided with a comparison of month and year-to-date actual and budgeted expenditures by type of expenditure (Payroll, Materials, etc.). Annual budget amounts are also shown for comparative purposes.

Monthly Cost Control Center by Master Plan Item Report - This is a summary level report. Focus is on the capital projects and operation and maintenance activities that a cost center has budgeted and/or charged during the year.

Monthly Budget Variance Explanation Report - Each month, cost centers are required to explain significant variances between budgeted and actual expenditures.

<u>Intranet Expenditures Budget Reports</u> – Flexible budget reporting is available to all budgeters through the Intranet. Budgeters are able to make budget to actual comparisons for projects, cost control centers and type of expenditure combination "drill-down" to detail levels to obtain additional details as desired.

<u>Additional Reporting</u> – Additional reports can be created by the budgeters in the format and levels of detail required from the budget system.

#### **Financial Structure**

Denver Water is limited by City Charter to have only one fund, the Water Works Fund, for all of its receipts and expenditures. The balance of the Water Works Fund is referred to in this budget document as the Designated Balance.

The Chart of Accounts utilized by Denver Water generally follows the structure presented by the National Association of Regulatory Utility Commissioners for Class A Water Utilities. The accounting system adheres to standards set by the Governmental Accounting Standards Board (GASB) and is audited annually by an independent CPA firm.

The Water Works system is completely funded through rates, fees and charges for services provided by Denver Water. Although Denver Water is an enterprise fund, there are no transfers to or from the general fund of the City and County of Denver.

Water rates pay for operation and maintenance expenses, repair and capital replacements and modifications to existing facilities, and debt service. Capital expenditures for new facilities and water supply are generally funded from other non-rate sources of funds: System Development Charges, participation charges from developers, and reimbursements. Debt may be used to supplement these non-rate services.

#### How to Read the 2004 Budget

#### From Summary to Detail

The 2004 Budget is arranged for easy reference. An overall summary is provided at the beginning of the budget. Summary level information is also presented at the beginning of each section within the budget document. Additionally, the narratives include references to related information found elsewhere in the document.

#### Components

Furthermore, each section of this budget booklet describes a particular component of the budget, as follows:

<u>For a summary overview of the entire 2004 Budget</u> - Read Section One. This section provides an overview of 2004 budgeted receipts, expenditures, designated balances and number of employees. It also includes a brief history of Denver Water and maps showing the area it serves and location of major facilities.

<u>For a receipt forecasts</u> - Read Section Two. This section provides information on all types of receipts.

<u>For expenditures by program</u> - Read Section Three. This section categorizes expenditures by program. Each major component of the process of providing water to our customers; raw water, recycling of water, treatment, delivery to customers, and general operations, are considered as programs. Each program is then further broken down into operation and maintenance and capital components. This format allows evaluation of the cost of each component of providing water from source to customer, down to detailed operation and maintenance activities and capital projects. It indicates why (for what activity or project) the expenditures are made. Information on both operation and maintenance activities as well as capital improvement and replacement projects is also provided.

<u>For expenditures by type</u> - Read Section Four. This section classifies total expenditures according to what was purchased, without regard to the activity or whether the expenditure was operation and maintenance or capital in nature. This section has information on the expenditures for labor, purchases of materials, services, equipment, construction contract payments, debt service and refunds.

<u>For information on Denver Water's organizational structure and performance measures - Read Section Five.</u> This section shows detailed number of employees, table of organization, activities by division and key performance measures for the organization.

<u>For information on debt</u> - Read Section Six. This section includes Denver Water's debt policy, debt service schedules and description of Certificate of Participation projects.

<u>For information on cash flow</u> - Read Section Seven. This section shows the impact of the 2004 budgeted receipts and expenditures on the designated balances and describes how these balances are to be used.

<u>For terms used in the budget document</u> - Read Section Eight. This section contains a glossary of terms.

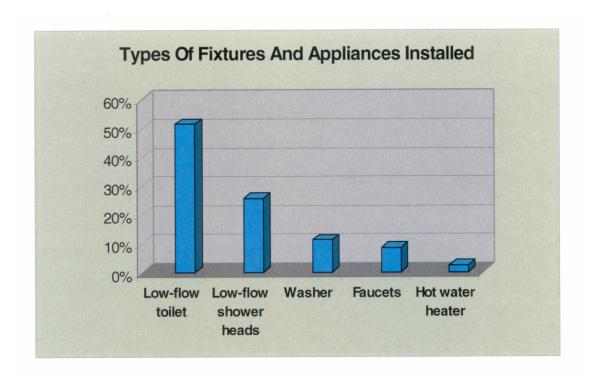


In a September 2003 survey of Denver Water customers, half of 800 customers polled who had installed, or planned to install water-saving appliances, said they did already, or would, use low-flow toilets as one way to help conserve water usage during the drought.

A Denver Water rebate/reimbursement program developed to encourage water users to switch to low-flow toilets and water-saving clothes washers offered a \$100 rebate for each replaced toilet, and a \$125 rebate for each replaced clothes washer.

Low-flow toilet use 1.6 gallons of water per flush, compared to 3 to 5 gallons used by older model toilets. A typical clothes washer uses 45 gallons per load, compared to new, horizontal axis/front loading machines, which use an average of 20 gallons per load.

More than 17,000 water-guzzling toilets, were replaced with low-flow fixtures under the Denver Water program. Program participants had to prove removal or destruction of their older models and proof of purchase of new, low-flow models in order to receive a rebate.



Many Denver Water customers polled indicated they had, or would install, water saving appliances.

#### Section 1 - 2004 Budget Summary

#### 2004 Beginning Balance

The 2004 Budget begins with a projected designated balance totaling \$163,405,000. For a detailed breakdown of this amount, see page 97.

#### **Receipts**

Total receipts for 2004 are projected to be \$209,893,000, including \$157,450,000 from the sale of water. Severe drought conditions experienced during 2002 and 2003 are expected to reduce the demand for water by 5% in 2004. Budgeted 2004 receipts from the sale of water are planned to be approximately \$7.4 million or 5% less than normal.

Non-operating, interest, hydropower and other receipts total \$18,879,000. Receipts used for the construction of new facilities include \$2,036,000 for participation receipts (payments to the Board for capacity in specific facilities to serve specific groups of customers) and \$22,034,000 for System Development Charge receipts (tap fees).

Reimbursements total \$494,000. Proceeds from debt financing for 2004are budgeted at \$9,000.000.

#### **Expenditures**

Total 2004 expenditures are budgeted at \$227,596,000. Operation and maintenance expenditures are budgeted to be \$103,583,000. Capital expenditures are budgeted at \$86,135,000. Debt service and related costs net of Interest on the debt service reserve funds are budgeted to be \$37,878,000.

Major capital projects include engineering and construction for the new Recycled Water Plant and Delivery System of \$16.3 million, Marston finished water improvements of \$2.1 million, Automated Meter Reading project, of \$10.1 million, Moffat Collection System Project of \$2.3 million, Chatfield Pump Station drought related improvements of \$2.4 million, Eleven Mile Reservoir outlet works drought related renovations of \$2.0 million, transmission and distribution mains, improvements and replacements of \$5.1 million, and new financial, CIS and other computer systems and equipment of \$9.6 million.

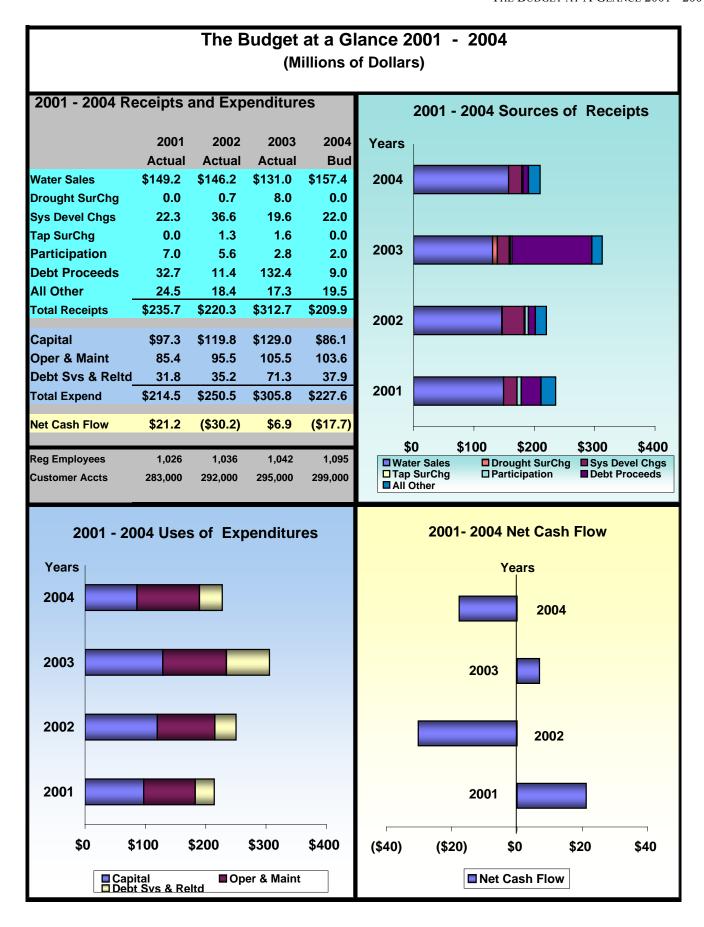
#### 2004 Ending Balance

The 2004 budgeted expenditures of \$227,596,000 are \$17,703,000 more than projected receipts of \$209,893,000 resulting in ending designated balances totaling \$145,702,000. The designated balances for system operations and capital are maintained to cover a portion of: (1) operation and maintenance, (2) non-expansion capital, (3) debt service, (4) self-insurance and (5) future capital projects. For more details, see Section 7, Designated Balance Summary.

#### 2004 Number of Employees

The 2004 proposed regular and introductory number of employees of 1,095 is eight more than authorized for 2003. The Manager and Staff Division is adding a new Human Resource Specialist to work with the Human Resources' computer system and automation of employee evaluations. The Finance Division is adding one new accountant to help with plant analysis workload. The Operation and Maintenance Division is adding a new T & D crew of six as a response to increased work loads, a journeyman assistant in the Metal Shop, and a water system operator. Seven meter reading positions are being deleted in the Public Affairs Division as a result of the Automated Meter Reading Project. One customer service field representative will be added for conservation water audits and three customer service specialists are being added for logging on new customers for the AMR project, monthly billing, and the call center. The remaining position is due to employees going from part-time to full-time status. A comparison of 2001 through 2003 actual, 2003 budget and budgeted 2004 regular and introductory employees by division is shown on page 73. Additional information by Division is available on pages 78-85. A summarized organization chart that shows reporting relationships is on page 77.

Summary Contents	Page(s):
2004 Budget Summary	15
The Budget at a Glance 2001 - 2004	17
Summary of Projected Receipts and Expenditures 2003-2004	18
Crosswalk of 2004 Budgeted Receipts to Related Capital and Operating Expenditures by Type of Expenditures	19
Drought, Rebate, Fire and Normal Operations Sources and Uses 2002 - 2004	20
2004 Receipts and Expenditures Budget Graphs	21
2004 Program Budget Graphs	22
Customers served per Regular Employee 1995 – 2004	23
Denver Water – A Condensed History	24
Denver Water Service Area, Population and Demand	27
Denver Water Collection System Map	30
Statistical Summary 1997-2002	31
Customer Service Data 1997-2002	32
Denver Facts - (Winter 2002-2003)	33



# Summary of Receipts and Expenditures 2003 - 2004

	2003 Budget		2003 Actual		2004 Budget
Beginning Designated Balance	\$ 156,540,000	\$	156,540,000	\$	163,405,000
Receipts from:					
Sale of Water	\$ 133,065,000	\$	131,038,000	\$	157,450,000
Drought Surcharge	11,043,000		8,001,000		0
Non-Operating, Hydropower,					
Interest, & Other	16,740,000		13,683,000		18,879,000
System Development Charges	23,783,000		19,649,000		22,034,000
Tap Surcharge	4,538,000		1,641,000		0
Participation	2,115,000		2,835,000		2,036,000
Reimbursements & Grants	3,123,000		3,420,000		494,000
Subtotal	\$ 194,407,000	\$	180,267,000	\$	200,893,000
Debt Proceeds	40,500,000		132,438,000		9,000,000
Total Receipts	\$ 234,907,000	\$	312,705,000	\$	209,893,000
Less Expenditures for:					
Operation & Maintenance Programs:					
Raw Water	\$ 14,080,000	\$	15,603,000	\$	14,089,000
Recycled Water	1,746,000		1,153,000		4,528,000
Water Treatment	18,170,000		20,369,000		21,144,000
Delivery	50,454,000		54,724,000		50,216,000
General Plant	12,556,000		13,614,000		13,606,000
Total Operation &		•	· · · · · · · · · · · · · · · · · · ·	•	
Maintenance Expenditures	\$ 97,006,000	\$	105,463,000	\$	103,583,000
Capital Programs:					
Raw Water	\$ 18,371,000	\$	19,918,000	\$	16,456,000
Recycled Water	54,898,000		54,689,000		17,010,000
Water Treatment	14,682,000		15,326,000		4,789,000
Delivery	32,177,000		31,187,000		34,718,000
General Plant	11,337,000		7,919,000		18,119,000
Historical Timing Adjustment	(8,000,000)		0		(4,957,000)
Total Capital Expenditures	\$ 123,465,000	\$	129,039,000	\$	86,135,000
Debt Service, Related Costs and Interest on Reserve Funds	\$ 33,630,000	\$	71,338,000	\$	37,878,000
Total Expenditures	\$ 254,101,000	\$	305,840,000	\$	227,596,000
Ending Designated Balance	\$ 137,346,000	\$	163,405,000	\$	145,702,000

# Crosswalk of 2004 Budgeted Receipts to Related Capital and Operating Expenditures by Type of Expenditure Sources and Uses (Thousands of Dollars)

			Capital					Total		
		Oper & Maint		Repl, Mod & Equip		New Add, Impv	Total Capital		Debt Service	2004 Budget
SOURCES:	-		_				•	-		
Receipts:										
Operating	\$	94,393	\$	25,179	\$	0 \$	25,179	\$	37,878 \$	157,450
Non-Operating		3,016		0		0	0		0	3,016
Hydropower		1,706		0		0	0		0	1,706
Systems Development Charges		0		0		22,034	22,034		0	22,034
Participation		0		0		2,036	2,036		0	2,036
Reimbursements & Grants		440		54		0	54		0	494
Interest on Investments		2,148		2,149			2,149		0	4,297
Other		1,880		1,880		6,100	7,980		0	9,860
Subtotal Receipts	\$	103,583	\$	29,262	\$	30,170 \$	59,432	\$	37,878 \$	200,893
Debt Proceeds	_	0	_	0		9,000	9,000		0	9,000
Total Receipts	\$	103,583	\$	29,262	\$	39,170 \$	68,432	\$	37,878 \$	209,893
Designated Balance	-	0	_	6,188	į	11,515	17,703		0	17,703
Total Sources	\$_	103,583	_\$	35,450	\$	50,685 \$	86,135	\$	37,878 \$	227,596
USES:										
Expenditures:										
Gross Payroll	\$	51,654	\$	7,134	\$	4,892 \$	12,026	\$	0 \$	63,680
Employee Benefits		26,465		0		0	0		0	26,465
Materials and Supplies		10,732		2,625		8,204	10,829		0	21,561
Utilities & Pumping Power		5,351		0		0	0		0	5,351
Professional Services		5,401		746		5,562	6,308		7	11,716
Other Services		13,005		7864		4,760	12,624		5	25,634
General Equipment		0		4,455		0	4,455		0	4,455
Construction Contract Payments		243		8,351		25,639	33,990		0	34,233
Refunds		373		0		0	0		0	373
Debt Service		0		0		0	0		38,146	38,146
Other		1,219		(2,168)		(2,789)	(4,957)		(280)	(4,018)
Total Expenditures	\$	114,443	\$	29,007	\$	46,268 \$	75,275	\$	37,878 \$	227,596
Distribution of Supporting Activities <sup>(1)</sup>	) -	(10,860)	<u>)</u>	6,443	,	4,417	10,860		0	0
Total Uses	\$_	103,583	_\$	35,450	\$	50,685 \$	86,135	\$	37,878 \$	227,596

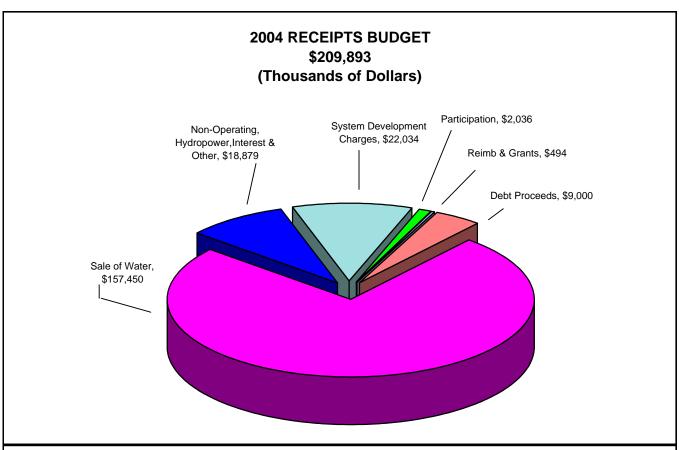
<sup>&</sup>lt;sup>(1)</sup> Supporting Activities are employee benefit, administrative and general expenditures that are not directly related to a specific capital project or operation and maintenance activity activity. These amounts are therefore allocated as indirect costs.

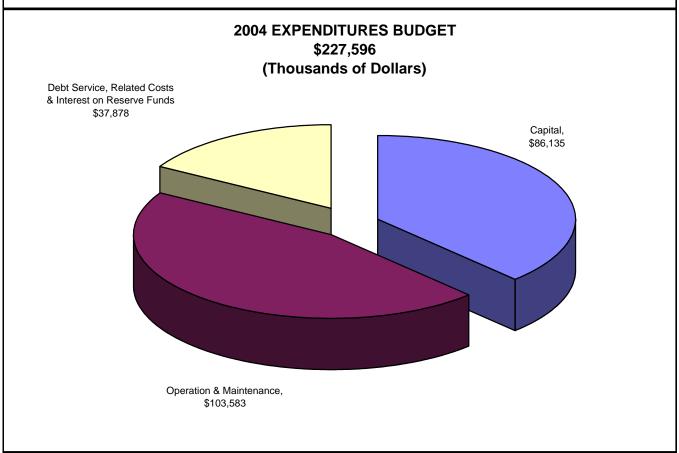
## Drought, Rebate, Fire and Normal Operations Sources and Uses 2002 - 2004

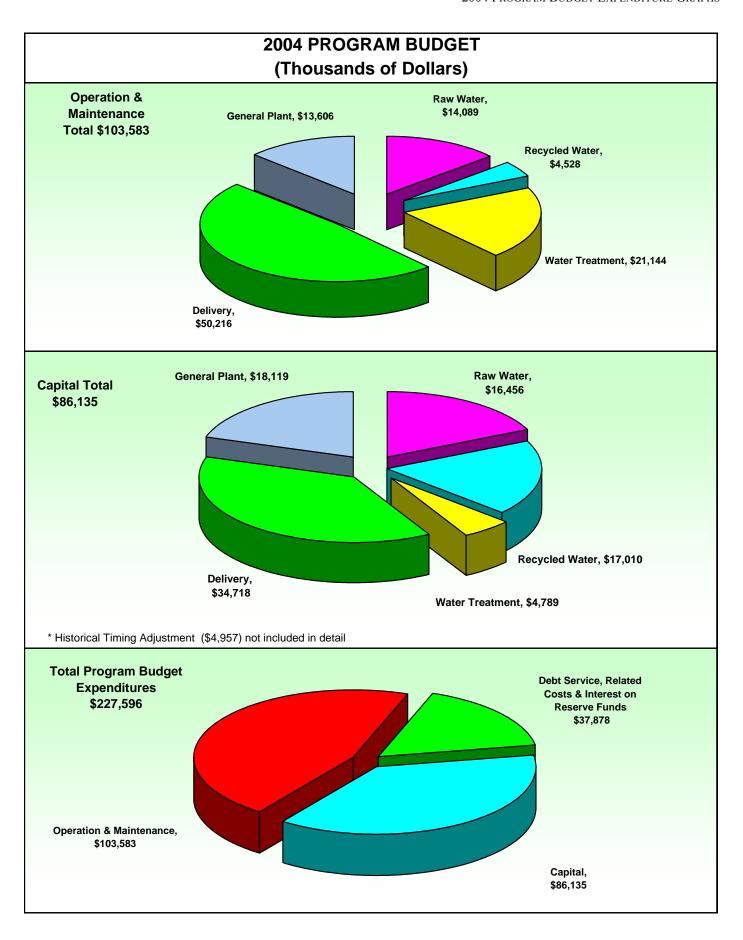
(Thousands of Dollars)

		DR	OU	GHT RESP	ON:	SE	DROUGHT REBATE PROGRAM					
	200	2		2003		2004		2002		2003		2004
	ACTU	JAL		ACTUAL		Budget	_ /	ACTUAL		ACTUAL		Budget
SOURCES:												
Sale of Water												
Drought Penalties	\$	111	\$	100	\$	-						
Drought Surcharge		660		6,801		-						
SDC												
Tap Surcharge							\$	1,333	\$	1,641	\$	-
Reimbursements and Grants:												
NRCS Grant												
EPA Grant		004		470		450						
Reimbursements		281		176		150						
Debt Proceeds		72										
All Other Total Sources	\$	73 1,125	\$	7,077	Φ	150	\$	1,333	\$	1,641	\$	
Total Sources	Φ	1,123	Φ	7,077	Ф	150	Φ	1,333	Φ	1,041	Φ	-
USES: (1)												
O & M	\$	1,409	\$	4,059	\$	555	\$	162	r.	3,615	ď	
Capital	Ф	863	Ф	4,059 2,877	Ф	4,873	Ф	102	Ф	3,015	Ф	-
Debt Service, Related Costs and		003		2,011		4,073						
Interest on Reserve Funds												
Total Uses	\$ 2	2,272	\$	6,936	\$	5,428	\$	162	\$	3,615	\$	
10101 0000	-	-,	Ψ	0,000	Ψ	0,120	*	102	Ψ	0,010	Ψ	
Annual Net Balance	\$ (*	1,147)	\$	141	\$	(5,278)	\$	1,171	\$	(1,974)	\$	-
Cumulative Balance (beginning 2002)		1,147)	\$	(1,006)	\$	(6,284)		1,171	\$	(803)		(803)
			FIR	E RESPON	SE			NO	RM.	AL OPERA	TIO	NS
	200	2		2003		2004		2002		2003		2004
	ACTU	IAL	A	ACTUAL		Budget	1	ACTUAL	1	ACTUAL		Budget
						•						
SOURCES:												
SOURCES: Sale of Water							\$	146,099	\$	130,938	\$	157,450
Sale of Water Drought Penalties							\$	146,099	\$	130,938	\$	157,450
Sale of Water Drought Penalties Drought Surcharge	\$	116	\$	1,200	\$	-	\$		\$		\$	
Sale of Water Drought Penalties Drought Surcharge SDC	\$	116	\$	1,200	\$		\$	146,099 36,644	\$	130,938 19,649	\$	157,450 22,034
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge	\$	116	\$	1,200	\$	-	\$		\$		\$	
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants:	\$		\$		\$	-	\$		\$		\$	
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant	\$	116 535	\$	2,108	\$	-	\$		\$		\$	
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant	\$		\$		\$	- - -	\$	36,644	\$	19,649	\$	22,034
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements	\$		\$	2,108	\$	- - -	\$	36,644 1,236	\$	19,649 963	\$	22,034 344
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds	\$		\$	2,108	\$	- - -	\$	36,644 1,236 11,393	\$	19,649 963 132,438	\$	22,034 344 9,000
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other		535 -		2,108 173		- - -		1,236 11,393 21,809		19,649 963 132,438 16,518		22,034 344 9,000 20,915
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds	\$		\$	2,108		- - -	\$	36,644 1,236 11,393	\$	19,649 963 132,438	\$	22,034 344 9,000
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other		535 -		2,108 173		- - -		1,236 11,393 21,809		19,649 963 132,438 16,518		22,034 344 9,000 20,915
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1)	\$	535 - 651	\$	2,108 173 3,481	\$	- - -	\$	1,236 11,393 21,809 217,181	\$	963 132,438 16,518 300,506	\$	22,034 344 9,000 20,915 209,743
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1) O & M	\$	535 -	\$	2,108 173 3,481	\$	- - - 71		1,236 11,393 21,809 217,181	\$	963 132,438 16,518 300,506	\$	22,034 344 9,000 20,915 209,743
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1) O & M Capital	\$	535 - 651 2,900	\$	2,108 173 3,481	\$	- - -	\$	1,236 11,393 21,809 217,181	\$	963 132,438 16,518 300,506	\$	22,034 344 9,000 20,915 209,743
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1) O & M Capital Debt Service, Related Costs and	\$	535 - 651 2,900	\$	2,108 173 3,481	\$	- - - 71	\$	1,236 11,393 21,809 217,181	\$	963 132,438 16,518 300,506	\$	22,034 344 9,000 20,915 209,743
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1) O & M Capital Debt Service, Related Costs and	\$ \$ 2	535 - 651 2,900	\$	2,108 173 3,481	\$	- - - 71	\$	1,236 11,393 21,809 217,181 101,693 108,212	\$	963 132,438 16,518 300,506 106,716 113,945	\$	22,034 344 9,000 20,915 209,743 113,817 69,744
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1) O & M Capital Debt Service, Related Costs and Interest on Reserve Funds Total Uses	\$ \$ 2	535 - 651 2,900 8	\$	2,108 173 3,481 662 1,282	\$ \$	- - 71 658	\$	1,236 11,393 21,809 217,181 101,693 108,212 35,258 245,163	\$	963 132,438 16,518 300,506 106,716 113,945 71,338 291,999	\$	22,034 344 9,000 20,915 209,743 113,817 69,744 37,878 221,439
Sale of Water Drought Penalties Drought Surcharge SDC Tap Surcharge Reimbursements and Grants: NRCS Grant EPA Grant Reimbursements Debt Proceeds All Other Total Sources  USES: (1) O & M Capital Debt Service, Related Costs and Interest on Reserve Funds	\$ 2 \$ 2 \$ (2	535 - 651 2,900 8	\$ \$	2,108 173 3,481 662 1,282	\$ \$	- - 71 658	\$	1,236 11,393 21,809 217,181 101,693 108,212 35,258	\$	963 132,438 16,518 300,506 106,716 113,945 71,338	\$	22,034 344 9,000 20,915 209,743 113,817 69,744 37,878

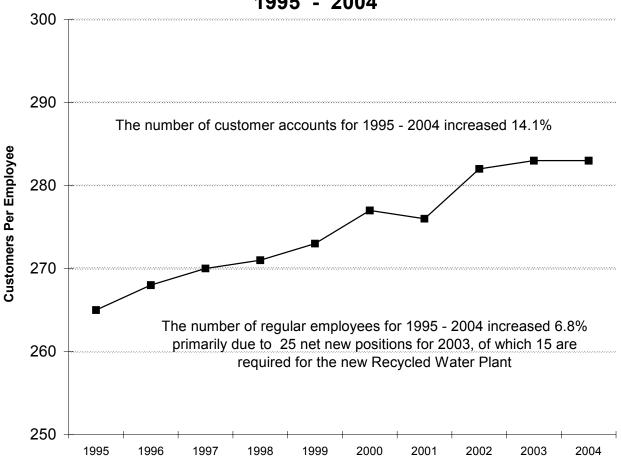
<sup>(1)</sup> Uses are on a direct expenditure basis for purposes of comparison to available resources.







### Customers Served Per Regular Employee 1995 - 2004



Years	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Employees <sup>(1)</sup>	989	989	990	1,002	1,003	1,006	1,026	1,036	1,042	1,056
Customers <sup>(2)</sup>	262,000	265,000	267,000	271,000	274,000	279,000	283,000	292,000	295,000	299,000
<b>Cust Per Empl</b>	265	268	270	271	273	277	276	282	283	283

<sup>&</sup>lt;sup>(1)</sup> The number of employees shown are reqular employees as of the end of each year. The projected number of regular employees of 1,095 is <u>reduced</u> by anticipated vacancy savings of 3.4% based historical trend.

<sup>(2) 2004</sup> number of customers is based on projection from the 2003 rate study.

### **Denver Water - A Condensed History**

After decades of watching warring private water companies struggle to bring drinking water to the City, often at exorbitant rates, Denver residents voted in 1918 to pass City Charter amendments creating the Denver Board of Water Commissioners. Voters also approved purchase of the Denver Union Water Company, transforming it into a public agency whose mission remains providing healthy drinking water at a fair price.

Denver Union was the survivor of 11 private companies that attempted to supply water to the growing community at the foot of the Rockies. They ranged from the Capitol Hydraulic Company of 1860 - incorporated to dig a ditch from the South Platte River to Brown's Bluff, now the Capitol Hill section of Denver - to the wily and powerful Denver Union headed by such movers and shakers as Walter Scott Cheesman, David Moffat and E. S. Kassler.

Since Denver Union had been deeply involved in municipal politics, provisions of the 1918 charter amendments require totally separate water works fund out of reach of the general City government. Conversely, the Water Board has no access to City general funds. This was intended to assure that the Water Board performs its sole task of supplying water to the inhabitants of Denver "for all uses and purposes and ...at the lowest rates good service will allow." The charter also directs the water system to pay its own way through charges for water service and earn enough for "betterments and improvements" to the system. Denver's pioneers had experienced the semi-arid nature of what early explorers had called "the Great American Desert" and wanted a "never failing" water supply, according to early newspaper accounts.

Only a few years after taking over the well-developed Denver Union system, the new five-member Water Board was faced with its first impending shortage of water. Population growth was rapidly transforming the City, and more water was needed. In 1924, Antero Reservoir, high in the South Park hay meadows near the headwaters of the South Platte River, was acquired to augment supply. In the late 1920s, just before onset of the Great Depression and Dust Bowl, the Water Board committed to build Eleven Mile Canyon Reservoir on the edge of South Park to assure supply. In the early 1930s, the Board made use of transmountain water rights by using the pilot bore of the famous Moffat Railroad Tunnel to send water to the drought-plagued city.

The end of World War II brought yet another population boom to the Denver area, and the Water Board again was faced with a shortage of water to meet the needs of growth. Work had been started on the Roberts Tunnel under the Continental Divide to bring water to the city from the Blue and Snake Rivers and Ten-Mile Creek by way of the North Fork of the South Platte. A continuing debate over the size of the dam to build at Dillon to divert water into the tunnel was resolved in favor of a "high dam," thus creating Dillon Reservoir in 1963. It is Denver's largest single storage facility and one of the state's premier recreational attractions.

Modern treatment plants process water before sending it to customers' taps through a network of more than 2,500 miles of mains under city and suburban streets. The Foothills Plant, completed in 1983, is considered a state-of-the-art facility capable of producing more than 280 million gallons of treated water daily to meet customer demands on hot summer days. Foothills, built at an elevation that eliminates the need to pump water into the system and its attendant cost, serves as the primary plant throughout the year. The Marston Plant, on West Quincy Avenue, and the Moffat Plant, on West 20th Avenue, help meet summer peak demands. Foothills and Marston are undergoing major renovations to help assure high water quality and make it possible to meet or exceed new national drinking water quality standards. Moffat has recently undergone similar upgrades.

Generation of clean hydroelectric power has become increasingly important to Denver Water. Hydro generators at Foothills, Strontia Springs Dam, Dillon Dam and at the east portal of the Roberts Tunnel were added in the mid-1980s to augment power generated at the department's Williams Fork Dam. Another generator was added in the mid-1990s at the Hillcrest Pump Station in southeast Denver. Construction of a hydro plant at Gross Dam is expected to start soon.

Ground was broken in the spring of 2001 for the department's \$164 million water recycling plant near the South Platte River in Commerce City. When the first phase is completed in 2004, up to 30 million gallons a day of treated, recycled water will be available to industrial users and irrigators through a nonpotable distribution system. Denver Metro Wastewater will supply effluent to the system, which will include a treatment plant on the site of Denver Water's old Potable Reuse Demonstration Plant, as well as pipelines, storage tanks and three pump stations.

Customers to be served by the new system, under Phase I, beginning in spring 2004, include Denver parks, including City, Washington, Schafer, Dunham and Swansea; the Denver Zoo, Excel Energy Cherokee Power Plant, City Park and Park Hill Golf courses and Bruce Randolph Middle School. A second phase, scheduled for completion in 2006, will see the addition of additional pump stations, distribution pipelines and storage facilities. It will serve portions of Stapleton and Lowry redevelopments by 2006, and the Rocky Mountain Arsenal by 2011.

The recycling facility is a water resource project for Denver Water. At full capacity in 2013, it will supply over 17,000 acre-feet of recycled water a year, freeing raw water for potable treatment. The plant will augment Denver's water supply, delaying the time when it will be necessary to divert more water from the Western Slope and construct new water supply facilities.

Denver Water faces continuing challenges as a result of the ongoing drought, which has held the area in its grasp for nearly five years, and from two major forest fires, the first in 1996, and the second in the summer of 2002. A spring snowstorm in March 2003, dumped nearly two feet of snow on Denver and the Front Range, pushed snowpack to near-normal levels and reservoir levels to nearly 90 percent of capacity. However, Denver Water, and its customers, continued under water restrictions through the summer of 2003. Additionally, Denver Water has called for changes in landscaping practices to promote less use of blue grass and water-hungry turf, and more emphasis on Xeriscaping (the use of drought-tolerant pants and vegetation) in urban landscape design. Conservation remains a goal for Denver Water and all Denver water users.

Likewise, Denver Water continues to address the after effects of two catastrophic forest fires that have occurred in the past eight years: the 1996 Buffalo Creek fire, and the 2002 Hayman fire, both of which charred Denver Water acreage that feeds Denver Water's water supplies in the South Platte drainage.

The Buffalo Creek fire charred thousands of acres of forest land upstream from Denver Water's Strontia Springs Reservoir, resulting in rain-induced flooding and premature sedimentation in the reservoir. Subsequent dredging operations helped to remediate the effects of the fire and flooding. A rain storm following the Hayman fire resulted in sediment being washed into Cheesman Lake in summer 2002. Denver Water has undertaken a 10-year reclamation project to address the effects of the Hayman Fire, including reseeding acreage scorched by the fire, construction of sedimentation dams in gullies and across streams that feed Cheesman Lake, and the planting of 250,000 seedlings in the Cheesman burn area.

"Managing through the drought" will continue to drive Denver Water planning and decision making for the foreseeable future. Winter 2003/2004 snowfall, although abundant in some mountain watershed areas that feed the Denver Water system, has not yet reached overall levels that would allow a return to non-restricted water usage by Denver Water customers.

Denver Water now serves over 1 million people, more than a quarter of the state's population. It uses less than 2 percent of the average annual flow of Colorado's rivers and streams to do it. Denver Water maintains a reputation as one of the nation's finest systems due to the solid foundation provided by the framers of Denver's City Charter amendments.

### **Drought and Financial Timeline 2002-2003**

Reservoir Content			Date	Description of Program (Financial matters in blue)
73%	May		May 8	Voluntary Program - targeted 10% Savings
71%	Jun			
66%	Jul		July 1	Mandatory restrictions, every 3 days watering,
				3 hours, targeted 30% savings
59%	Aug		Aug. 1, 8, 13	Public Meetings on drought surcharges
			August 22	Winter Surcharges approved
54%	Sep	)(	September 1	watering hours reduced to 2, every third day
		7	September 4	Water rate increase approved, 3.1% increase in revenue
			September 18	Tap Surcharge begins (20% of System Development Charge)
50%	Oct		October 1	Outdoor watering prohibited
49%	Nov		November 1	Winter Surcharge billing begins
48%	Dec		December 18	10% System Development Charge increase approved
46%	Jan			
44%	Feb		Feb. 10,11,18	Public Meetings on summer surcharges and drought restrictions
43%	Mar			
43%	Apr		April 2	Summer drought surcharges approved
			April 16	Summer drought program approved, Stage II restrictions
46%	May		May 1	Summer Stage II restrictions begin, two days a week watering,
				15 min. per zone up to 8 zones, no new seed or sod
63%	Jun	~	June 1	Summer Surcharge billing begins
			June 2	Relaxed restrictions, unlimited zones and allowed planting of sod
85%	Jul		June 25	Tap Surcharge end, Summer Surcharge phase-out announced
		7	July 15	Three days of water allowed each week
85%	Aug		July 31	Summer Surcharge billing ends
82%	Sep		Sep. 2-28	Customer telephone survey, reactions to the drought
79%	Oct		October 1	Voluntary program effective, no mandatory restrictions
			October 1	Water rate increase approved, 5.0% increase in revenue
76%	Nov		October 22	20% System Development Charge increase approved, new
				Recycled Water customer class introduced.
	Dec			

### The Denver Water Service Area, Population, & Demand

Denver Water's Combined Service Area, shown below, totals 329 square miles. The Combined Service Area is composed of the City and County of Denver and 69 treated water distributor contracts (see Table 1). In addition, Denver Water serves several special contracts with fixed contract amounts and two major raw water contracts.

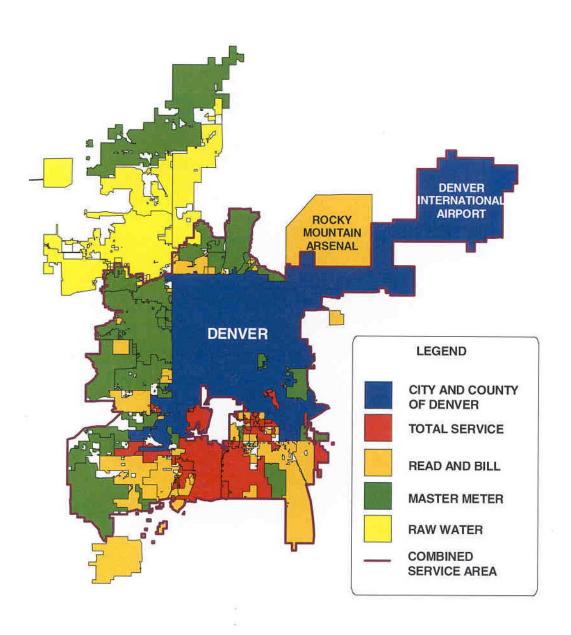


Table 1

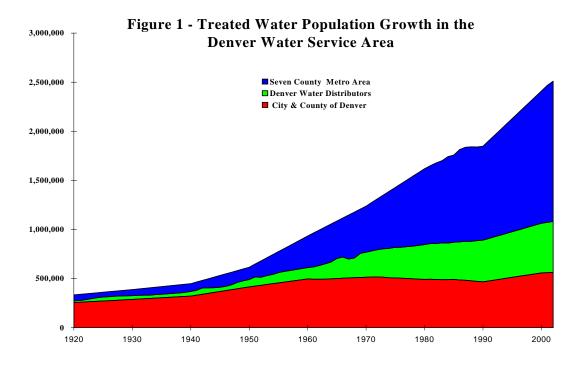
Denver Water Distributor Contract Service Areas
(Square Miles)

<u>Denver</u>	
City and County	111.3
Denver International Airport	43.3
Subtotal	154.6
<u>Outside Denver</u>	
Total Service Distributors	40.5
Read and Bill Distributors	41.0
Master Meter Distributors	90.1
Subtotal	171.6
TOTAL	326.2

Source: 2003 Denver Water Directory of Distributors, Section 4. Figures exclude fixed special contracts and approximately 2 .9 square miles not presently within a contract distributor area.

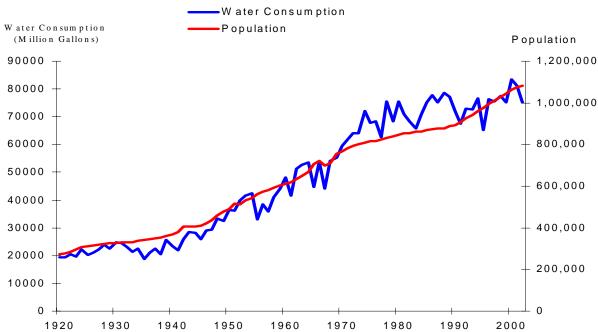
In 1988, the City and County of Denver annexed 43.3 square miles for the Denver International Airport and commercial corridor. This annexation expanded the city limits of Denver. The old Stapleton Airport area is being redeveloped in mixed commercial and residential uses.

Denver Water serves three main types of distributors: Total Service, Read and Bill, and Master Meter. In Total Service districts, Denver Water operates and maintains the district's facilities, including customer billing, at a level equivalent to the service provided within the Denver City Limits. In Read and Bill districts, Denver Water reads the meters and bills the customers, but does not operate the distribution system. In Master Meter districts, Denver Water sells water wholesale to the district and bills the district directly. Denver Water also has several special contracts that receive a fixed amount of water and are not included in the figures above.

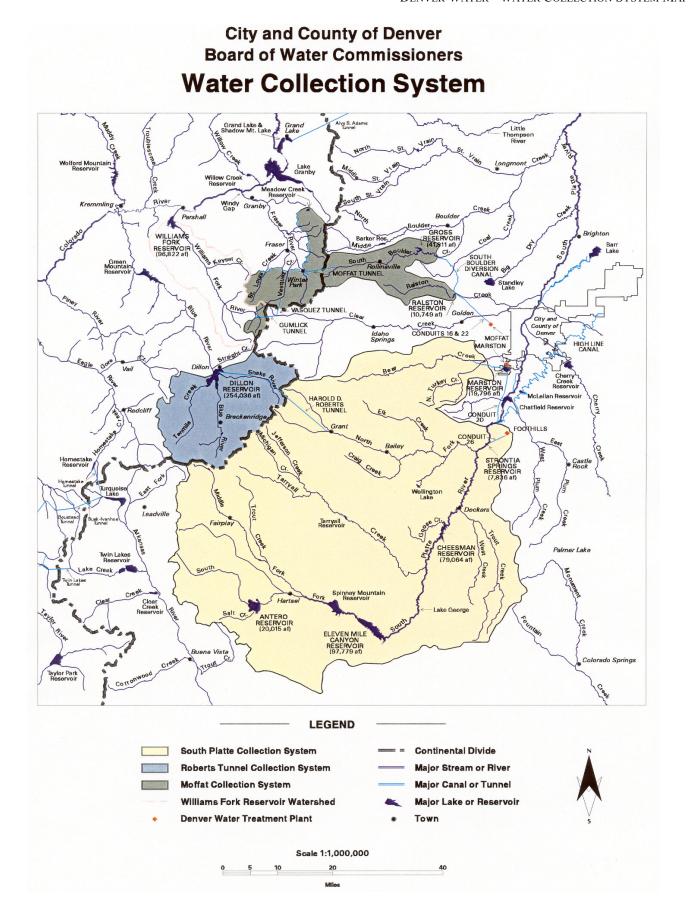


### **Our Customers**

Denver Water supplies water to about half of the population in the Denver Metropolitan Area, about 1.18 million people (see Figure 1). Since 1950, the treated water population served by Denver Water has doubled. The demand for treated water has increased from the 1950 level of 37 billion gallons to the current level of 75.2 billion gallons (see Figure 2). Currently, there are about 1,081,000 people receiving treated water and approximately 100,000 receiving raw water from Denver Water.



 $Figure\ 2\ -\ Treated\ W\ ater\ Population\ \&\ D\ em\ and$ 



#### STATISTICAL SUMMARY: 1997 - 2002

	<u>Note</u>	2002	2001	2000	1999	1998	1997
Population Served (July 1)	(1)	1,081,000	1,073,000	1,064,000	1,046,000	1,029,000	1,012,000
Total Treated Water Consumption in Million Gallons Average Daily Consumption in Million Gallons Average Daily Consumption per Capita in Gallons Maximum Daily Consumption in Million Gallons Maximum Hour Treated Water Use Rate (MGD)	(2)	75,221.18 206.09 191 419.20 788.09	81,054.72 222.07 207 488.71 716.86	83,585.25 228.38 215 478.19 751.47	75,332.01 206.12 197 475.66 676.26	77,475.48 212.26 206 512.53 763.87	75,363.33 206.47 204 517.57 712.48
Treated Water Pumped in Million Gallons		51,205.33	54,161.28	47,953.92	38,149.92	33,990.21	34,179.67
Raw Water Storage Capacity in Acre-Feet Replacement Reservoir Storage Capacity in Acre-Fer	et	561,883 122,432	561,883 122,432	545,476 96,822	545,476 96,822	545,476 96,822	545,476 96,822
Supply from South Platte River in Acre-Feet Supply from Blue River/Roberts Tunnel Sys in Acre-F Supply from Moffat System in Acre-Feet	(3) Feet	58,856 56,848 33,116	129,926 102,282 71,296	133,912 102,750 59,811	210,777 54,064 57,272	190,948 48,384 54,220	194,478 92,174 77,630
Treated Water Pumping Capacity in MGD Raw Water Pumping Capacity in MGD Treatment Plant Capacity in MGD Treated Water Reservoir Capacity in Million Gallons	(2) (2) (2)	1,070.6 92.2 645.0 406.45	1,052.5 92.2 645.0 378.45	1,052.5 92.2 645.0 378.75	1,052.5 92.2 645.0 378.75	1,027.5 92.2 645.0 371.75	1,027.5 92.2 645.0 400.5
Supply Mains in Miles (Mountain Collection System) Supply Mains in Miles (Metropolitan Denver Area) T & D Mains in Miles (inside Denver & Total Service Contract Distributors) Nonpotable Transmission & Distribution Mains in Mile	es	77.6 40.7 2,552.0 17.6	77.6 40.7 2,508.0 17.3	77.6 40.7 2,474.0 17.3	77.6 40.7 2,449.0 16.4	77.6 39.2 2,416.0 15.6	77.6 39.2 2,486.1 15.6
Total Active Taps - End of Year Fire Hydrants Operated & Maintained Breaks in Mains - Denver Service Leaks Fire Hydrants Tested and Repaired	(1)	295,841 14,380 287 1,034 26,047	286,051 14,173 261 794 29,604	282,985 13,991 243 907 23,875	278,374 13,681 195 663 25,052	274,938 13,136 166 779 27,150	271,338 13,575 251 591 26,188
Full-Time Equivalent Regular Employees(authorized)		1,062.4	1,060.1	1,046.1	1,044	1,036	1,032
Financial Information:	_ (4)						
Gross Property, Plant & Equipment Net Property, Plant & Equipment (after depreciation) Additions to Property, Plant & Equipment	(4)	\$1,711,944 1,319,641 128,479	\$1,588,496 1,220,205 104,721	\$1,492,281 1,144,868 87,493	\$1,408,333 1,082,973 65,806	\$1,347,620 1,042,918 73,095	\$1,282,062 993,753 47,664
Operating Revenues Operating Expenses Operating Income Income before Capital Contributions (formerly Net Income)	(5) (5)	\$148,262 120,670 27,592 23,774	\$151,198 110,618 40,580 38,257	\$153,429 106,066 47,363 27,436	\$127,655 100,719 26,936 21,117	\$128,570 97,489 31,081 21,611	\$121,074 93,202 27,872 19,198
Increase in Net Assets Total Long-Term Debt	(6)	\$69,139 300,695	\$78,849 308,879	\$71,204 289,681	\$28,175 249,757	\$52,237 299,773	\$60,698 329,466

#### Footnotes:

<sup>(1)</sup> Population estimates based on treated water customers only. Beginning in 1996, population served and active taps exclude City of Broomfield.

<sup>(2)</sup> MGD = Million Gallons per Day.

<sup>(3)</sup> Supply includes effluent exchanges.

<sup>(4)</sup> Amounts expressed in thousands.

<sup>(5)</sup> See "Statements of Revenues, Expenses and Changes in Net Assets".

<sup>(6)</sup> Current and long-term portions of bonds payable, certificates of participation, and obligations under capital lease, net of discounts, preiums and deferred losses on advance refundings.

### CUSTOMER SERVICE DATA: 1997 - 2002

	<u>Note</u>	2002	2001	2000	1999	1998	1997
Active Taps:							
Beginning of Year	(1)	286,051	282,985	278,374	274938	271,338	268,676
Activated during Year	(4)	10,053	3,273	4,871	3,732	3,919	2,825
Discontinued during Year	_	(263)	(207)	(260)	(296)	(319)	(163)
Net Increase during Year	(4)	9,790	3,066	4,611	3,436	3,600	2,662
Total Active Taps - End of Year	_	295,841	286,051	282,985	278,374	274,938	271,338
Services behind Master Meters	(4)	74,535	66,997	66,135	64,655	64,225	63,449
Active Meters (excludes customers behind Master Meters)	(1)						
Inside City		150,486	148,936	147,472	145466	143,602	142,169 <sup>(4)</sup>
Read and Bill		34,425	36,955	36,760	36114	35,379	34,638
Total Service		35,209	31,974	31,442	30965	30,575	29,892
City and County		1,065	1,071	1,058	1055	1,019	1,018
Monthly	_	121	118	118	119	138	172
Total Active Meters		221,306	219,054	216,850	213,719	210,713	207,889
Total Active Taps - End of Year	_	295,841	286,051	282,985	278,374	274,938	271,338
Stub-Ins on System	(2)	2,553	2,992	2,389	3,086	3,483	1,895
Fire Hydrant Use Permits		830	456	680	1,132	1,185	999
AMR (Automatic Meter Reading) Installations		56,499	30,359	298	0	0	0
Turn-Offs due to Deliquent Accounts		11,586	10,293	9,045	7,920	7,992	8,650
In-Home Water Audits		60	98	1,155	1,092	1,751	1,637
Call Center Calls		281,339	193,395	173,016	169,399	140,284	143,955
Water Quality Calls							
Taste and Odor		125	78	220	148	530	91
Clarity		15	75	75	189	278	197
Hardness		1	0	1	69	70	68
Other		135	80	9	485	644	1,361
New Taps Made	(3)	3,572	3,869	3,834	4,498	5,838	3,273

#### Footnotes:

 $<sup>(1) \ \ \</sup>text{Service is on or has not been off for 5 consecutive years. Does not include taps sold to raw water distributors.}$ 

<sup>(2)</sup> Stub-Ins are a connection made solely to extend the service line from the main to the valve at the property line prior to the paving of the street and are not considered a tap.

<sup>(3)</sup> Beginning in 1997, large meters for wholesale distributors excluded from count, consistent with "Analysis of Customer Accounts for Treated Water."

<sup>(4)</sup> Increase of 6,820 taps for Master Meter accounts within Willows Water District in 2002.

### Denver Facts (Winter – 2002-2003)

### Denver:

Date Founded:	1858	Universities and Colleges:	14
Date Incorporated:	1861	D D. I.I O. I I E II (0004)	70 407
Government:	Mayor / Council	Denver Public School Enrollment (2001)	
Land Area: :(square miles)	154.63	High Schools:	10
Land Area: (acres)	98,963	Middle Schools:	18
Latitude:	39° 43' N	Elementary Schools:	87
Longitude:	-104° 58' W		
Elevation: (feet above sea level)		Shopping Centers:	58
Lowest Point: (feet above sea le			
Highest Point: (feet above sea l		Restaurants:	700+
Rivers: South Plat	te, Cherry Creek		
Average Annual Rainfall: (ind		Convention Facilities (2001):	
Average Annual Snowfall: (in		Conventions:	45
Average February Temperat		Delegate Attendance:	190,063
Average August Temperatur	re: 72° F	Colorado Convention Center (square	t) 300,000
Average Growing Season: (c	days) 165		
Average Sunshine: (days)	300+	Denver Employment (2000):	
		Jobs in Denver:	468,392
<b>Municipal Parks and Recreation</b>	:	Percent of Metro Area:	33.3%
Park Area (acres)	5,100	Largest Employee Sectors: Services, Government, Retail	
Parks:	301	Major Industries:	
Golf Courses (public and private	e): 15	Communications, Utilities, Transportation	
Parkways: (miles)	100	Unemployment Rate (2002):	4.5%
Recreation Centers:	29		
Swimming Pools:	19	Downtown (2001):	
Hike-Bikeways: (miles)	135	Employment:	113.000
Mountain Parks: (acres)	13,600	Total Floorspace: (square feet)	45,000,000
Playing Fields:	325	Office: (square feet)	25,000,000
	7 Lighted) 143	Retail: (square feet	2,800,000
(1)	•,	Hotel Rooms:	5,329
Denver Public Libraries (2001):	23		-,
Circulation:	12,486,851	Assessed Valuation (2001): \$7,	885,465,670
=		+·/	,,

### **Metropolitan Population Trends by City**

opontan i opu	iation n	chas by Oity					Land Area
Municipality	<u>Rank</u>		<u>P</u>	opulation			Square Miles
Denver	1	<u>2000</u> 554,636	<u>1990</u> 467,610	<u>1980</u> 492,686	<u>1970</u> 514,678	<u>1960</u> 493,887	<u>2000</u> 154.6
Aurora	2	276,393	222,103	158,588	74,974	48,548	142.7
Lakewood	3	144,126	126,481	112,860	92,743	N/A	42.5
Arvada	4	102,153	89,235	84,576	49,844	19,242	33.0
Westminster	5	100,940	74,625	50,211	19,512	13,850	32.9
Centennial	6	100,677	N/A	N/A	N/A	N/A	28.0
Boulder	7	94,673	83,312	76,685	66,870	37,718	25.4
Thornton	8	82,384	55,031	40,343	13,326	11,353	27.2
Longmont	9	71,093	51,555	42,942	23,209	11,489	21.9
Littleton	10	40,340	33,685	28,631	26,466	13,670	13.9

(Continued on next page)

### Denver Facts (Winter – 2002-2003)

<u>POPULATION</u>	2000		<u>1990</u>		<u>1980</u>		(Change) 1	
<u>Total</u>	Number	%	Number	%	Number	%	Number	<u>%</u>
A								
Age	0.4.700		04.704		00.404		0.005	0.0
0-4 Years	34,769	6.8	34,764	7.4	33,134	6.8	3,005	8.6
5-17	83,997	15.1	68,115	14.6	77,743	15.8	15,882	23.3
18-34	173,260	31.2	141,831	30.3	178,958	36.4	31,127	22.2
35-64	197,184	35.6	158,095	33.8	140,607	28.6	39,089	24.7
65 & Over	62,426	11.3	64,805	13.9	61,923	12.6	-2,379	-3.7
Median Age	33.1		34		30.02		-9	-2.7
Household Type								
Total Households	239,235	100.0	210,952	100.0	211,004	100.0	28,283	13.4
Family	119,300	49.9	109,037	51.7	119,288	56.3	10,263	9.4
Individual	119,935	50.1	101,915	48.3	92,716	43.7	18,020	17.7
Persons Per	2.27	50.1	2.17	40.5	2.27	45.7	.1	4.6
Persons in Group Qtrs	12,719		10,850		12,554		1,869	17.2
reisons in Gloup Qus	12,719		10,030		12,554		1,009	17.2
Education (25 years a	nd Over)							
0-8 yrs completed	34,253	9.1	24,678	7.7	39,241	12.7	9,575	38.8
12 or more	74,922	78.5	75,653	79.2	93,134	74.7	-731	-1.0
College (4 or more	129,065	34.5	93,144	29.0	76718	24.8	35,921	38.6
Labor Force (civilian)								
In Labor Force	301,434	67.6	250,743	66.9	257 720	66.0	50,691	20.2
		94.3		93.2	257,720	95.0		20.2
Employed	284,340		233,602		244,838		50,738	
Unemployed	17,094	3.8	17,141	4.5	12,882	5.0	-47	-0.3
Not in Labor Force	144,263	32.3	121,503	32.5	133,074	34.1	22,760	18.7
Employment Type								
Commercial	165,775	58.3	121,071	51.8	114,895	46.9	44,704	36.9
Industrial	56,387	19.8	54,875	23.5	66,859	27.3	1,512	2.7
Public/Quasi-Public	60,523	21.3	52,274	22.4	56,545	23.1	8,249	15.8

Land Use	2000	1986
	Estimated Acres (thousands)	<b>Estimated Acres (thousands)</b>
Total	99.0	71.2
Residential	24.1	22.8
Commercial	3.8	3.0
Industrial	4.9	4.5
TCU	26.0	7.8
Public/Semi-Public	7.1	6.0
Parks and Recreation	n 4.0	3.6
Vacant	7.1	7.5
Streets	22.0	16.0
1988 Annexation:	27,718 Acre	es

### **Major Redevelopment Projects:** Gateway:

 Gateway:
 4,416 Acres

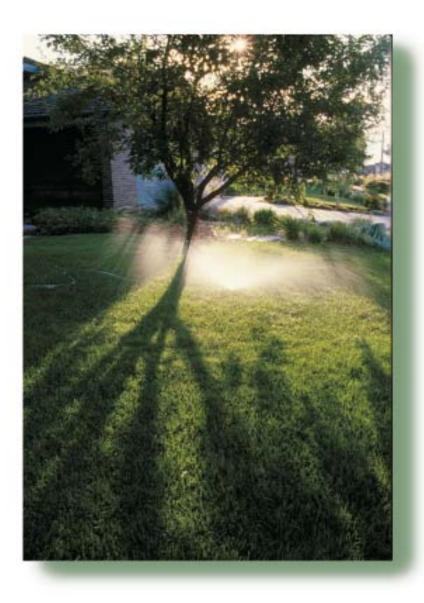
 Lowry:
 1,866 Acres

 Stapleton:
 4,700 Acres

 Central Platte Valley:
 1,100 Acres

Demographic Information taken from:

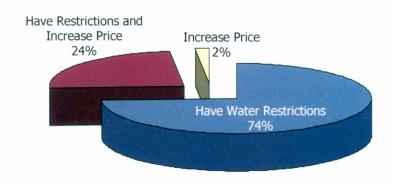
Denver Facts prepared by:
Denver Community Planning and Development Agency
City and County of Denver
www://DenverGov.org/planning



Ninety-eight percent of customers polled in the Denver Water Customer Survey indicated they favored water restrictions and/or rate increases to reduce water use during the drought. Only 2 percent of those polled indicated they favored rate increases alone to reduce water usage.

Both restrictions on lawn watering and surcharges for excessive water use were employed by Denver Water to reduce water usage.

# In order for Denver Water to reduce water use, is it better to:



In September 2003, Denver Water commissioned a survey to gauge customer attitudes toward the drought. The survey was conducted by a professional marketing company. A majority of Denver Water customers polled indicated their support for water restrictions during the drought.

### Section 2 - Receipts

### **Receipts Summary**

Total 2004 receipts are comprised of operating receipts from the sale of water to customers, participation receipts (payments for capacity in specific facilities to serve specific groups of customers), System Development Charge receipts (tap fees), receipts from bond proceeds, as well as small amounts of non-operating and other receipts. Total 2004 receipts are forecast to be \$209,893,000. The following is a brief description of each receipt shown on page 35.

### **Operating Receipts (Sale of water to customers)**

Operating receipts are generated from sales of water to customers. They are used to pay for normal operation and maintenance, replacement of facilities, plant additions as well as debt service. The 2004 budget of \$157,450,000 reflects a rate increase of 5.4% and an anticipated 5% reduction in normal annual demand as a result of a continuing emphasis on conservation in response to drought conditions during 2002 and 2003. Actual 2003 operating receipts of \$131,038,000 were \$2.0 million less than budgeted primarily due to Denver Water's restriction program in the face of the severe 2003 drought.

Approximately 58% of the 2004 billed water sales revenue is projected to be from outside the City of Denver, while an estimated 51% of the customers are located inside the City of Denver. Water provided to outside City customers is billed at a higher rate than inside City customers.

A breakdown of billed operating revenue by type of customer is shown on page 39. Billed operating revenues and number of customers inside and outside the City of Denver are shown graphically on page 40. See pages 41 - 49 for additional information on rate structure.

### **Drought Surcharge**

The drought surcharge was a temporary charge that was adopted on September 18, 2002. It was then adjusted on April 2, 2003 in anticipation of summer time watering demand patterns and the continuing drought. It was designed to encourage conservation through price and to act as an enforcement mechanism for other drought restrictions. By the Board's direction, the proceeds were to be used to help offset drought & fire related costs. Drought Surcharge receipts for 2003 of \$8,001,000 were \$3,042,000 less than budgeted. This underrun was a result of the Board's decision to end Drought Surcharges early due to improved reservoir levels. Drought surcharges are not budgeted for 2004.

### **Non-Operating Receipts**

These receipts are obtained from payments for services that Denver Water renders such as ditch assessments for delivery of non-potable water for irrigation, main inspections, installation of taps, the calculating and mailing of sewer bills, rents on Denver Water facilities and other such services. Total non-operating receipts for 2004 are projected to be \$3,016,000, based on historical trend. A breakdown by type of receipt is shown on page 39. Actual 2003 receipts of \$3,154,000 were \$343,000 more than budgeted substantially due to higher than budgeted tap sales and income from rental of Board property.

### **Hydropower Receipts**

These are receipts from the sale of surplus power provided by generating facilities at the Dillon, Strontia Springs and Williams Fork dams, Roberts Tunnel, Foothills Treatment Plant and Conduit 27 at Hillcrest. Hydropower receipts for 2004 are anticipated to be \$1,706,000 or, 121% of 2003 receipts. This increase is due to expected higher reservoir levels that will be available for generating power in 2004. In 2003, hydropower receipts of \$1,402,000 were \$414,000 more than budgeted primarily due to higher discharge rates than expected as a result of improved reservoir levels.

### **System Development Charges**

These are tap fees for new connections to the Denver Water system that represent the value of the capacity used by the new customer. System Development Charge receipts are projected to total \$22,034,000 for 2004 based on anticipated building trends. See pages 45 - 47 for additional information. Actual 2003 receipts of \$19,649,000 were \$4.1 million less than budgeted due to less home and commercial construction than expected.

### **Tap Surcharge**

The tap surcharge was a temporary fee imposed during 2002 and 2003 as a result of water supply shortage and was terminated when reservoir storage reached 80% of full at the end of June 2003. The tap surcharge was an additional fee based on 20% of the system development charge. It went into effect September 18, 2002. The proceeds were used for rebate programs related to conservation and water use efficiency programs such as rebates for low volume toilets, clothes washers and xexriscape landscaping materials. Tap surcharges in 2003 of \$1,641,000 were \$2,897,000 below budget. This shortfall was a result of lower System Development Charges than anticipated and the Board discontinuing Tap Surcharges on June 25, 2003. Tap surcharge receipts are not budgeted for 2004.

### **Participation Receipts**

Participation receipts for 2004 are projected to be \$2,036,000. The largest item in the 2004 budget is an expected receipt of \$800,000 from the City of Broomfield for increased capacity in Conduit 81. See page 45 for additional information.

Actual 2003 receipts of \$2,835,000 were \$720,000 more than budgeted substantially due to higher than expected receipts for capacity in existing participation facilities, partially offset by underruns of \$475,000 for Conduits 91(Broomfield) and \$281,000 for 150 (Glendale) and anticipated total service conversions that did not occur.

### **Reimbursements and Grants**

Reimbursements of \$494,000 are anticipated for 2004. This includes \$150,000 for cloud seeding reimbursement, \$90,000 from the City Aurora for its share of Strontia Springs Reservoir operation and maintenance and \$254,000 from numerous smaller projects based on historical trend. Total 2003 reimbursements of \$3,420,000 were \$297,000 million more than budgeted. This overrun was a result of an unbudgeted \$659,000 reimbursement from Adams County related to the gravel pit construction project. The overage was partially offset by a lower reimbursement from the EPA relating to the Hayman burn area. Less rehabilitation than anticipated was required and grant receipts were \$327,000 less than expected. The remaining \$35,000 underrun was due to various small projects

### Interest on Investments

Denver Water has two investment portfolios. The first, the liquidity portfolio, is designated to meet daily and annual needs for cash. The liquidity portfolio is invested in short-term, low-risk money market instruments. The other portfolio, the long term investment portfolio, consists of funds that are not expected to be needed for several years, such as reserves against catastrophic losses, and future capital programs. The long term investment portfolio is managed by an outside investment firm and contains investment grade corporate bonds as well as government securities. Both portfolios are accounted for on a fair market value basis. The combined interest paid to Denver Water on both investment portfolios in 2004 is budgeted at \$4,297,000. Actual 2003 interest receipts of \$4,879,000 were \$393,000 over budget due to larger amounts of cash on hand resulting from larger than budgeted bond proceeds in 2003. Of the interest received, \$1.5 million was interest received on the liquidity portfolio. The balance represents interest reinvested in the longer-term investment portfolio.

#### Other

These receipts consist of reimbursements for the relocation of mains and fire hydrants, proceeds from the sale of surplus assets, employee payments for health and dental insurance and minor items not included elsewhere. Other receipts are projected to be \$9,860,000 in 2004, including \$6.1 million for proposed surplus land sales and \$1.6 million for employee payments for health and dental insurance. Actual 2003 receipts of \$4,248,000 are \$4.2 million under budget substantially due to \$6,100,000 of anticipated land sales that were deferred to 2004, partialy offset by \$821,000 for employee payments for health and dental insurance.

### **Debt Proceeds**

In 2004, Denver Water is projected to issue \$9,000,000 of new debt. In 2003, Denver Water took advantage of favorable interest rates and issued more debt than budgeted. Bond proceeds of \$132,438,000 were received, and were composed of \$127,155,000 in principal amount of revenue bonds and \$5,283,000 in premiums on the bonds. Total bond proceeds exceeded the budget by \$92.0 million and were made up of \$85.7 million in new debt with the balance used to refund existing debt.

# Comparison of Receipts 2001 - 2004

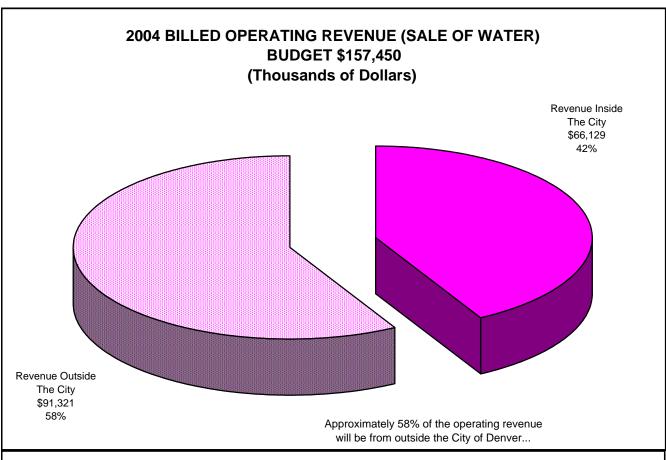
(Thousands of Dollars)

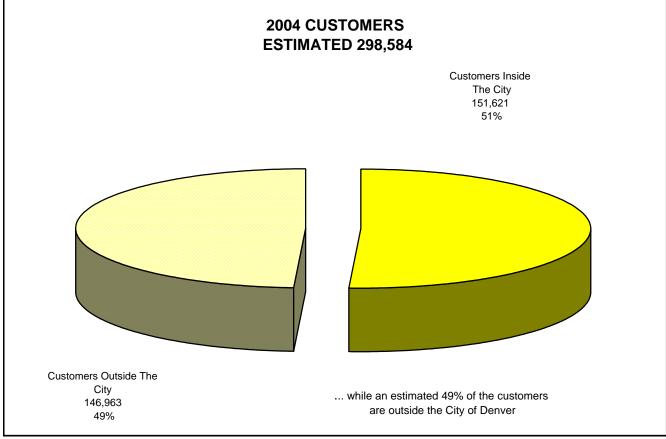
		2001 Actual		2002 Actual		2003 Budget		2003 Actual		2004 Budget
Receipts:	-				_				_	
Operating	\$	149,188	\$	146,210	\$	133,065	\$	131,038	\$	157,450
Drought Surcharge		0		776		11,043		8,001		0
Non-Operating		3,102		3,169		2,811		3,154		3,016
Hydropower		1,904		1,456		988		1,402		1,706
System Development Charges		22,259		36,644		23,783		19,649		22,034
Tap Surcharge		0		1,333		4,538		1,641		0
Participation		7,034		5,573		2,115		2,835		2,036
Reimbursements & Grants		6,802		2,052		3,123		3,420		494
Interest on Investments		9,522		8,459		4,486		4,879		4,297
Other	-	3,200	_	3,225	_	8,455	_	4,248	_	9,860
Subtotal Receipts	\$	203,011	\$	208,897	\$	194,407	\$	180,267	\$	200,893
Debt Proceeds	-	32,658	_	11,393	-	40,500	_	132,438	-	9,000
Total Receipts	\$	235,669	\$_	220,290	\$_	234,907	\$_	312,705	\$_	209,893

# Comparison of Operating and Non-Operating Receipts 2001 - 2004

(Thousands of Dollars)

		2001 Actual		2002 Actual	2003 Budget		2003 Actual		2004 Budget
Operating Receipts (Water Sales)	-		-			-		-	
Billed Operating Revenue: Metered General	\$	98,763	\$	96,398	\$ 90,799	\$	83,753	\$	105,270
Private Fire Protection		655		672	659		731		659
Public Authority		6,705		5,408	5,981		4,486		5,991
Sales for Resale-Treated		34,153		32,719	29,521		30,985		35,740
Other Sales of Water-Raw		299		435	132		1,077		267
Sales for Resale-Raw		3,788		5,514	3,252		5,096		5,602
Drought Permits		0		74	0		0		0
Drought Penalties		0		111	338		100		0
Other Operating Revenue		3,548		3,838	2,250		3,656		2,250
Recycled Water	_	0	_	0	0	_	0	_	859
Total Billed Operating Revenue	\$	147,911	\$	145,169	\$ 132,932	\$	129,884	\$	156,638
Cash Flow Adjustment*	-	1,277	_	1,041	133	_	1,154	_	812
Total Operating Receipts	\$	149,188	\$_	146,210	\$ 133,065	\$_	131,038	\$_	157,450
<ul> <li>% Receipts to Billed Revenue</li> <li>* Cash Flow Adjustment is the diff received in a year due to delays</li> </ul>									100.50%
Non-Operating Receipts									
Merchandising, Jobbing & Contract Work	\$	1,669	\$	1,623	\$ 1,397	\$	1,546	\$	1,523
Canals, Ditches and Ranches		641		706	633		670		674
Sewer Billing Charges		513		539	532		559		559
Other Non-Operating		279		301	249		379		260
Total Non-Operating Receipts	\$	3,102	<b>-</b> \$_	3,169	\$ 2,811	<b>-</b> \$_	3,154	<b>-</b> \$_	3,016





### **Water Rates**

The Board of Water Commissioners is authorized by Section 10.1.9 of the Charter to set rates for water service. Since its inception, the Board has set rates at a level sufficient to service its debt and to meet its expenses of operation and maintenance. The Board has never required ad valorem taxes to meet its obligations.

Rate increases are implemented from time to time in order to offset the impact of inflation and other operating financial requirements.

### **Water Rate Levels**

The Board continually reviews its structure of water rates, adjusting them as may be necessary to provide adequate levels of revenue. In view of the operational and capital needs of the system and the impact of inflation, the Board conducts ongoing rate studies to determine required rate levels.

On October 1, 2003, the Board adopted new rates to take effect for water bills dated on and after January 1, 2004. On October 22, 2003 the Board adopted the creation of the Recycled Water customer class. These customers will begin receiving recycled water in 2004. The new water rates are designed to increase revenue from water sales, under normal weather conditions, by 5.0%.

### **History of Rate Increases**

The following statistics show effective dates of past actions by the Board in setting adequate rates and the proposed incremental increases in revenues. During the period 1918 through 1958 there were several adjustments in rates, but the net effect was that rates in 1958 were unchanged compared to the rates in 1918.

Effective Date April 1, 1975 April 16, 1976 April 16, 1980 February 1, 1982 April 15, 1986	Increase in Revenues 18.5% 20.0% 32.2% 12.0% 7.0%
April 15, 1987	5.0%
June 15, 1992	2.2%
June 1, 1993	4.0%
June 1, 1994	4.5%
January 1, 1995	8.4%
January 1, 1996	5.8%
January 1, 1997	4.5%
January 1, 1998	3.1%
January 4, 1999	0.54%
March 6, 2000	2.5%
January 1, 2001	2.4%
January 1, 2002	2.5%
January 1, 2003	3.1%
January 1,2004	5.0%

### **Types of Service**

Water rates are based on three types of retail metered service: Inside City, Outside City Read and Bill, and Outside City Total Service. Inside City service refers to all water users inside Denver. Outside City Read and Bill service refers to areas outside the city where Denver Water is responsible for water delivery to a distributor and for reading meters and billing customers, while the distributor is responsible for operation and maintenance of the distribution system. Outside City Total Service refers to areas outside the city where Denver Water is responsible for water delivery, reading meters and billing customers, as well as operation and maintenance of the distribution system.

Denver Water also provides wholesale water service to Master Meter Distributors (water districts outside the city) that own and operate their own water system, perform their own meter reading and customer billing, and who purchase water on a wholesale basis for distribution to their respective retail customers. A variation of the standard Master Meter Contract was added in 2002. A Master Meter Distributor may elect to continue customer billing and collection functions within its service area but contracts with Denver Water to operate, maintain and replace its water system as needed. Denver Water will bill the Distributor through master meters at a rate that reflects the cost of providing this additional service. As of December 31, 2002, wholesale water district contracts accounted for 24.8% of total treated water consumption.

A variation to the standard "Total Service" contract is the Total Service Improvement contract in which a Distributor whose system does not currently meet Denver Water Engineering Standards may request to enter into a "Total Service" Contract that includes special provisions for Denver Water to take dominion over the Distributor's existing water system and to upgrade the Distributor's water system to meet Denver Water engineering standards. A surcharge is assessed to each of the customers within the Distributor's service area to pay for the improvements.

### **Residential Bimonthly Billings**

The table below indicates the estimated 2004 bimonthly billing for a single-family home with an annual consumption of 126,000 gallons per year for 3/4" metered service. It was prepared for comparison purposes only.

Average Summer

		- 11 01 0.g o 0 0
Type of Service	Effective January 1, 2004	Effective January 1, 2004
Inside City	\$24.47	\$56.46
Outside City (Read & Bill)	29.87	70.67
Outside City (Total Service)	35.39	85.19
	<u>Month</u>	Consumption in Gallons
	January - February	11,000
	March - April	12,000
	May - June	23,000
	July - August	39,000
	September - October	28,000
	November - December	<u>13,000</u>
	Total Annual Consumption	<u>126,000</u>

Average Winter

### 2003 Water Consumption and Largest Customers

Denver Water does not depend on any one customer or any group of customers for a major portion of its revenue. As shown in the table below, the 25 largest customers accounted for only 4.74% of treated water sales revenue received in 2003.

## 25 LARGEST CUSTOMERS - WATER CONSUMPTION AND REVENUE - 2003 (NON-ACCRUAL BASIS)<sup>1</sup>

Account Type	Consumption (000 Gallons)	Water Revenue
Multi-location petroleum retailer	449,745	\$ 846,418
Pubic Utility	340,995	613,457
School System	274,152	425,559
Housing Authority	202,613	307,932
Public Recreation Agency	150,792	308,716
Federal Government	147,247	276,231
Retail Grocer	141,133	221,608
Medical Center	136,863	210,418
Manufacturer	133,626	252,279
Medical Center	130,139	216,826
Homeowners Association	112,172	176,567
Homeowners Association	112,024	175,423
Manufacturer	108,684	157,801
Public Utility	102,420	191,856
Property Management	102,039	160,060
School System	96,941	114,797
Beverage Company	96,054	150,547
Beverage Company	92,322	139,668
Food Company	85,086	128,294
Medical Center	79,551	109,160
Homeowners Association	75,389	114,937
Hotel	70,420	100,858
Public Utility	62,867	117,544
Homeowners Association	62,525	94,097
Homeowners Association	60,919	116,349
Total - 25 Largest Customers	3,426,718	\$ 5,727,401
Total Sales of Treated Water	62,930,319	\$ 120,806,424
Percent of 25 Largest Customers to Total Sales		
of Treated Water	5.45%	4.74%

<sup>&</sup>lt;sup>1</sup>This schedule represents actual billings made for water during the year. The difference from amounts on an accrual basis is immaterial. In addition to the accounts listed, Denver Water provided 1,881,648 (000 gallons) of treated water to the City and County of Denver. Revenues from these sales were \$2,159,640.

### **Survey of Comparative Water Bills**

This table compares Denver's annual residential water bills with those of other independent suppliers in the Denver Metropolitan area for a representative residential customer based on usage of 126,000 gallons per year. This information is for comparison purposes only.

# ANNUAL RESIDENTIAL WATER CHARGES DENVER AND OTHER WATER DISTRIBUTORS IN THE DENVER METROPOLITAN AREA 2003

City	Annual Water <u>Service Charge</u>	Percent of Denver Inside City Customer Charges
Golden Outside	\$822.00	338.57%
Lafayette Outside	644.60	273.74%
Thornton Outside	619.08	254.99%
Arvada Outside	592.20	243.92%
Colorado Springs Outside	541.65	223.10%
Louisville Outside	507.00	208.82%
Morrison Outside	477.00	196.47%
Westminster Outside	466.67	192.21%
Northglenn Inside	453.50	186.79%
Boulder Outside	428.31	176.41%
Thornton Inside	412.56	169.93%
Golden Inside	411.00	169.28%
Highlands Ranch	402.00	165.58%
Broomfield Inside	398.10	163.97%
Westminster Inside	380.10	156.56%
Boulder Inside	379.59	156.35%
Pueblo Outside	370.68	152.68%
Denver Outside	361.77	149.01%
Colorado Springs Inside	359.32	148.00%
Aurora Inside	334.44	137.75%
Lafayette Inside	332.30	136.87%
Englewood Outside	302.92	124.77%
Arvada Inside	296.10	121.96%
Louisville Inside	267.00	109.97%
Glenwood Springs Inside	248.08	102.18%
Pueblo Inside	247.08	101.77%
Denver Inside	242.79	100.00%
Englewood Inside	221.98	91.43%

### **System Development Charges and Participation Receipts**

In addition to operating revenues and bond proceeds, funds are generated from (1) System Development Charges ("SDC's"), which are fees received for new connections to Denver Water's system, and (2) Participation Receipts, which are payments for capacity in specific facilities to serve specific groups of customers.

The System Development Charge ("SDC"), instituted in 1973, has provided a major source of funds for capital expenditures. Since 1973, Denver Water has collected approximately \$458.2 million in SDCs. This charge applies to any applicant who is granted a license to take water through Denver Water's system or through a system deriving its supply from Denver Water. Such charge is assessed upon application for a new tap and is based upon the (1) gross square footage of the single family residential lot or, (2) the number of units in a multiplex building up to 5 units or, (3) the size of the connection required. (See table on the following page.)

Since 1974, developers have been required to participate in the front-end financing of facilities necessary to meet their specific needs. Total participation receipts of \$118.6 million have been collected since inception.

On October 22, 2003, the Denver Board of Water Commissioners approved an average 20% increase for all SDCs within Denver Water's Combined Service Area.

# System Development Charges and Participation Receipts Collected (Cash Basis - net of amounts refunded) 1973 - 2003

	SDC's	<u> </u>	Participation Receipts
2003	\$ 19,614,948	\$	2,831,285
2002	36,590,914		5,567,014
2001	22,186,342		7,026,906
2000	25,525,391		6,392,360
1999	24,223,691		11,963,951
1998	33,155,890		8,411,534
1997	45,058,104		3,732,524
1996	15,137,300		2,913,102
1995	15,527,600		3,927,400
1994	13,535,700		2,881,800
1993	12,181,800		1,343,600
1992	10,920,300		1,198,800
1991	7,530,400		2,330,700
1990	6,615,100		1,838,700
1989	6,251,400		4,965,200
1988	6,084,600		3,067,700
1987	8,544,400		4,561,300
1973-86	<u>149,473,600</u>		43,647,100
Total	\$ <u>458,157,480</u>	\$	<u>118,600,976</u>

# History of Increases System Development Charges (First Implemented in 1973)

Date	Incremental Increase
July 1, 1973	100.0%
April 1, 1975	50.0%
April 16, 1976	50.0%
January 1, 1980	50.0%
February 1, 1982	50.0%
January 1, 1986	7.0%
January 1, 1998	5.0%
January 4, 1999	5.0%
January 1, 2001	9.0%
April 1, 2003	9.2%
October 22, 2003	20.0%

### Water Rate Structure (Effective January 1, 2004)

Customers are billed a service charge plus a consumption charge as follows:

**RETAIL SERVICE CHARGE:** 

Monthly \$3.41 Bimonthly \$4.91

RETAIL CONSUMPTION CHARGE (Bimonthly)

	Rate Per 1,000 Gallons			
Residential:		Outside City	Outside City	
Single Family	Inside City	Read and Bill	Total Service	
First 22,000 Gallons	\$ 1.63	\$ 2.08	\$ 2.54	
Next 38,000 Gallons	1.96	2.50	3.05	
All Over 60,000 Gallons	2.45	3.12	3.81	
Small Multi-Family with single meter First 30,000 Gallons Over 30,000 Gallons	1.44 1.69	1.89 2.27	2.14 2.57	
All Other Retail: Winter	1.41	1.84	1.98	
Summer	1.69	1.0 <del>4</del> 2.21	2.38	
Guilling	1.03	Z.Z I	2.00	

WHOLESALE RATE OUTSIDE CITY ONLY (Master Meter) Rate Per 1,000 Gallons
Consumption Charge:

All Consumption \$ 2.00

WHOLESALE with Maintenance (Master Meter Maintenance) Rate Per 1,000 Gallons

All Consumption \$ 2.77

# System Development Charge Schedule (Effective October 22, 2003)

### Single Family

<u>Inside Denver</u> <u>Outside Denver</u>

\$1,500 + \$0.34 per Sq. Ft. \$2,100 +\$0.48 per Sq. Ft.

Multifamily

<u>Inside Denver</u> <u>Outside Denver</u>

\$5,700 + \$1,250 for each unit over 2 \$7,950 + \$1,750 for each unit over 2

All Other	Treate	Treated Water			
	Inside Denver	Outside Denver			
Tap Size (\$/Tap)					
3/4	\$4,200	\$5,900			
1	12,600	17,700			
11/2	25,200	35,400			
2	37,800	53,100			
3	92,400	129,800			
4	163,800	230,100			
6	281,400	395,300			
8	378,000	531,000			
10	478,800	672,600			
12	583.800	820.100			

### Non-Potable

	<u>Inside Denver</u>	Outside Denver
Tap Size (\$/Tap)		
3/4	\$2,600	\$3,600
1	7,800	10,800
1 ½	20,800	28,800
2	33,800	46,800
3	57,200	79,200
4	85,800	118,800
6	176,800	244,800
8	228,800	316,800
10	293,800	406,800
12	418,600	579,600

	Treate	d Water	Non-Potat	ole Water
Acre Foot Conversion (\$/AF) _	Inside Denver	Outside Denver	Inside Denver	Outside Denver
Inside the Combined Service Area	9,150	12,825	5,600	7,825
Outside the Combined Service Are	а	13 400		7 825

### Drought and Tap Surcharges for 2002 & 2003

### TAP SURCHARGE - effective September 18, 2002 through June 25, 2003.

Tap Surcharge 20% added to SDC

### WINTER DROUGHT SURCHARGES - effective November 1, 2002 through May 31, 2003

**Table 1 - Single Family Residential** 

Block	Threshold* (000 gallons)	Surcharge
Minimum Use	0 – 7	No Surcharge
Block 1	8 – 22	\$0.25
Block 2	23 – 60	\$0.50
Block 3	60+	\$0.75

Table 2 - Small Multi-Family Residential

Block	Duplex	3-Plex	4-Plex	5-Plex	Surcharge
Minimum Use*	0 – 13	0 – 18	0 – 23	0 – 28	No Surcharge
Block 1	14 – 30	19 – 42	24 – 54	29 – 66	\$0.25
Block 2	31 – 80	43 – 103	55 – 136	67 – 200	\$0.50
Block 3	81+	104+	137+	201+	\$0.75

<sup>\*</sup> Usage in (000) gallons

Table 3 - All Other, Master Meter, Raw Water & Irrigation

Block	Threshold (000) gallons*	All Other Retail	Master Meter	Raw Water	Irrigation
	` <i>'</i> •				
Minimum Use	Up to 70% of	No Surcharge	No Surcharge	No Surcharge	
	2001 usage				\$0.75 per
Block1	71 – 100% of	\$0.50 per	\$0.50 per	\$0.15 per	1,000 gallons
	2001 usage	1,000 gallons	1,000 gallons	1,000 gallons	for all usage
Block 2	101%+ of	\$0.75 per	for all usage	for all usage	
	2001 usage	1,000 gallons	over 70%	over 70%	

<sup>\*</sup> Threshold amounts are on a bimonthly basis

### SUMMER DROUGHT SURCHARGES - effective June 1, 2003 through July 31, 2003

**Table 1 - Single Family Residential** 

Block	Threshold* (000 gallons)	Surcharge
Minimum Use	0 – 18	No Surcharge
Block 1	19 – 22	\$1.58
Block 2	23 – 28	\$2.48
Block 3	29 – 34	\$3.25
Block 4	35 – 40	\$4.25
Block 5	41 – 46	\$5.56
Block 6	47 – 52	\$7.26
Block 7	53 – 60	\$9.50
Block 8	61+	\$11.85

<sup>\*</sup>Threshold amounts are on a bimonthly basis

Table 2 - Small Multifamily

Block	Duplex	3-Plex	4-Plex	5-Plex	Surcharge
Minimum Use*	0 – 23	0 – 28	0 – 33	0 – 39	No Surcharge
Block 1	24 – 30	29 – 42	34 – 54	39 – 66	\$1.58
Block 2	31 – 36	43 – 48	55 – 60	67 – 72	\$2.48
Block 3	37 – 42	49 – 54	61 – 66	73 – 78	\$3.25
Block 4	43 – 48	55 – 60	67 – 72	79 – 84	\$4.25
Block 5	49 – 54	61 – 66	73 – 78	85 – 90	\$5.56
Block 6	55 – 60	67 – 72	79 – 84	91 – 96	\$7.26
Block 7	61 – 80	73 – 103	85 – 136	97 – 200	\$9.50
Block 8	81+	104+	137+	201+	\$11.85

<sup>\*</sup> Usage in (000) gallons

Table 3 - All Other, Master Meter, Raw Water

Level	Threshold	All Other*	Master Meter	Raw Water	Hydrant Permits
Minimum Use	70% of 2001 Consumption	No Surcharge	No Surcharge	No Surcharge	\$1.81
Block1	71 – 100% of 2001 Consump- tion	\$4.25	\$4.25	\$1.10	For All Consump-
Block 2	Over 100% of 2001 Consump- tion	\$7.26			tion

<sup>\*</sup>The "All Other" class includes: Commercial, Industrial, Government and Multi Family buildings over 5 units.

### **Table 4 – Irrigation Only Accounts**

Level	All Other	Sports Fields	High Public Use**	
50% or less	No Surcharge	No Surcharge	70% or less	No Surcharge
51% - 70%	\$4.25	\$4.25	71% - 80%	\$4.25
71% - 100%	\$5.56	\$5.56	81% - 100%	\$5.56
Over 100%	\$7.26	\$7.26	Over 100%	\$7.26

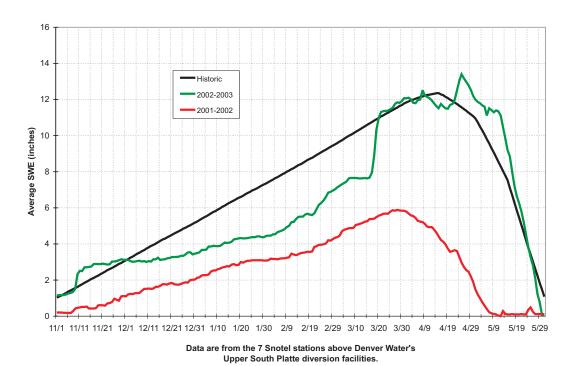
<sup>\*\*</sup> Selected High Public Use customers are aggregated for all accounts.



The March 2003 blizzard that dumped nearly two feet of snow on Denver and the Front Range pushed snowpack in the mountains from 80 percent of normal to 100 percent of normal. The increase in snowpack resulted in mountain and Front Range reservoirs jumping from an average of 45 percent of normal water levels to 86 percent of normal between February and July of 2003. Some individual reservoirs, including Dillon, Williams Fork, Gross, Ralston and Marston, were filled to capacity.

With the help of Mother Nature, Denver Water was able to reduce the severity of water restrictions during the summer of 2003. Tap surcharges were removed June 25. Demand surcharges were phased out as of July 31. Denver Water was able to go completely to voluntary restrictions on Oct. 1.

### Denver's South Platte Watershed Snow Water Equivalent



The March 2003 blizzard returned moisture levels in mountain snowpack to above-average levels.

### **Section 3 - Expenditures By Program**

### **Program Summary**

Denver Water engages in specific activities to carry out Strategic and Integrated Resource Plan policies. These activities have been grouped into five broad categories or programs that follow the flow of water from raw water source to the customer's tap. Each program is further broken down into operation and maintenance and capital expenditure components.

Raw Water Program - Provision of an adequate raw water supply. Includes collection and impounding reservoirs, collection systems, ditches and canals and raw water supply mains.

Recycled Water Program - Includes studies, engineering and construction of successive use of water for non-potable purposes.

Water Treatment Program - Treatment of water for delivery to customers. Includes treatment plants and the Water Quality Control Laboratory.

Delivery Program - Providing treated water to customers and distributors. Includes pumping stations, treated water reservoirs, transmission and distribution mains, fire hydrants, decentralization stations, conservation activities, meter reading and customer billing and assistance.

General Plant Program - Includes the West Side complex, administrative and meeting facilities, warehouses, yards and maintenance shops.

The programs have been further divided into expenditures for operation and maintenance activities and for capital projects. Total 2004 program budget expenditures of \$227,596,000 include \$103,583,000 for operation and maintenance; \$86,135,000 for new capital additions, replacements and improvements; and \$37,878,000 for debt service and related costs.

### **Operation and Maintenance**

Denver Water experienced several unanticipated impacts on its operations over the past few years that resulted in substantial expenditures in cleanup and repair.

Security measures following September 11, 2001 resulted in estimated additional expenditures of \$330,000 for 2001, \$1.8 million for 2002, \$346,000 for 2003 and an estimated \$1.3 million for 2004.

Several forest fires were also experienced in 2002. The Snaking Creek fire in the Pike National Forest in April 2002 resulted in approximately \$24,000 related to fire containment. The Schoonover fire which affected the Cheesman Reservoir facilities, in May 2002, resulted in fire containment expenditures of approximately \$30,000.

The major fire in 2002 was the Hayman fire which started in June and was finally controlled in July. Over 7,000 acres of the Cheesman Reservoir property was affected by the fire. 2002 costs included \$2,900,000 for rehabilitation of the Cheesman property. Additional rehabilitation costs in 2003 were \$662,000 for reseeding, contouring and related expenses, with \$1,333,000 in capital work for fence replacement, road realignment and sedimentation check dams to capture sediment before it flows into the reservoir.

2002 was also impacted by a severe drought resulting in declaration of a Stage II drought July 1 with water restrictions. Costs related to conservation advertising, permitting, water monitors and other drought response related activities totaled \$1,409,000 for 2002 and \$4,058,000 for 2003. Customer rebates for clothes washers and water conserving toilets were \$162,000 for 2002 and \$3,615,000 for 2003, respectively. In 2004, \$555,000 is budgeted for cloud seeding and continuing drought related activities. Capital additions and improvements for drought response include \$863,000 for 2002, \$2,876,000 for 2003 and \$4,873,000 for 2004.

Operation and maintenance expenditures have also continued to rise due to increasing costs for water treatment, conduit, main repairs and environmental compliance related activities.

### **Major Capital Project Impact on Operations**

Regulations promulgated under the Safe Drinking Water Act together with normal aging of facilities built in the 1920's and 1930's have had a significant impact on the cost of water treatment operations. \$11.6 million was spent on capital upgrades and additions needed to meet Federal and State water quality and environmental safety regulations during 2003. An additional \$190,000 is budgeted for 2004.

Redevelopment of Stapleton Airport and Lowry Air Force Base continues to have substantial impact on capital and operation and maintenance budgets. Stapleton Airport was closed in 1995 upon the opening of the new Denver International Airport. Lowry was decommissioned and the former base made available for redevelopment in September 1994. Anticipated additional operation and maintenance costs for 2004 are estimated at \$12,000. Future capital and operation and maintenance expenditure projections depend on the development schedule for these areas.

The new Recycled Water Plant began construction in 2000 and will become operational in the spring, 2004. First year operation and maintenance expenditures for 2004 are budgeted to be \$2.9 million.

A new headquarters complex at Winter Park was completed in 2003 at a cost of \$4.1 million. It is anticipated that the operation and maintenance costs for the relocated facility will be more than the one it replaces as the new headquarters is larger and has up to date facilities. Estimated costs will be available after the new headquarters has been operation for several months.

A number of read and bill and master meter areas are expected to convert to total service contracts over the next several years due to new water testing regulations by the Environmental Protection Agency. Estimated additional costs related to operate and maintain the new areas will be determined as they convert to total service.

### Capital

Capital expenditures for 2003 totaled \$129,039,000; \$5.6 million more than budgeted. This overrun is substantially due to the Auto Meter Reading Project, proceeding more quickly than expected, of \$3.1 million, and the unbudgeted gravel pit slurry wall construction of \$3.3 million.

Total 2004 budgeted capital expenditures are \$86,135,000. Major construction projects include \$10.7 million to complete Phase I construction of the Recycled Water Plant to receive and treat effluent from the Metro Sewer Plant to serve non-potable customers. An additional \$5.6 million for construction of pumping, storage and a dual distribution system are also included in this project. Phases I and II consisting of 6,600 acre-feet of supply and 30 million gallons per day of treatment began construction in 2001 with completion scheduled for spring, 2004.

Marston finished water improvements of \$2.1 million will begin construction in May, 2004 and are scheduled for completion in 2005.

Installation of equipment to implement automated meter reading throughout the Denver Water service area is budgeted at \$10.1 million for 2004. This project began in 2001 and is expected to be completed over a five-year period.

A list of major 2004 capital projects is shown on page 54. Additional detail information may be found on pages 56 through 68.

### **Capital Financing**

Capital projects are financed through a mixture of participation receipts, system development charges and reimbursements for relocations of water facilities as a result of highway and other construction, debt, reserves and other sources.

Approximately \$24.1 million of 2004 capital expenditures are shared with water distributors and others in the metropolitan area through participation contracts and system development charges, see Section 2 - Receipts Forecast, page 35. For Crosswalks of the 2004 Budgeted Receipts, Related Capital and Operating Expenditures by Type of Expenditure and Drought, Rebates, Fire and Normal Operations Sources and Uses see pages 19 and 20 for additional information.

## MAJOR 2004 CAPITAL PROJECTS (Thousands of Dollars)

(Thousands of Donais)		
	_	2004 Capital Budget
PROGRAM: RAW WATER		
<b>Gross Dam Hydro Unit -</b> Install hydroelectric unit to generate clean power, produce income and meet FERC requirements. Purchase of equipment anticipated in 2004. Construction anticipated to begin in late 2004. Completion anticipated in 2005.	\$	1,875
Integrated Resource Plan Projects <sup>(1)</sup> :  Moffat Collection System Project - The Planning Division, through its PACSM water resource model, has determined that a water supply shortage will occur at the Moffat Treatment Plant during some drought years. This water supply shortage increases as build-out of the Combined Service Area is approached. If the Moffat Treatment Plant does not have enough water to treat during the summer of a drought, Denver will not be able to meet its customer's water supply needs from the remaining two treatment plants. Therefore, development of additional water supply for the Moffat Treatment Plant is a high priority.	\$	2,262
Gravel Pit Storage Below Metro Wastewater - Will develop storage using reclaimed gravel pits downstream from Metro Sewer outfall to recapture water released to supplement Metro Reach flows in average and above average years. In dry years, the project will recapture reusable return flow when no exchange potential exists at S. Platte Intakes and release water in late spring/early summer when exchange potential does exist for new yield and augment the Recycled Water Project supply requirements.	\$	1,852
PROGRAM: RECYCLED WATER		
Recycled Water Project - Includes design and construction of a treatment plant to receive and treat effluent from the Metro Sewer Plant to served recycled water to customers. Pumping, storage facilities and a dual distribution system are also included in this project. Phase I - Project design started January, 1999 with construction beginning January, 2001. Scheduled to go on line February, 2004.	\$	10,652
<b>Recycled Distribution System</b> - Conduits 303 (Westerly Creek), 304, 305, 306, 307, 301 and and Capitol Hill Recycled water Distribution Mains.  Construction began January, 2003. Completion date is anticipated for late 2005.	\$	5,654
PROGRAM: WATER TREATMENT		
Marston Finished Water Improvements - Modify piping between Reservoirs 3 and 4 to accommodate full plant flows. Modify Marston Pump Station suction channel to provide operational flexibility. Construction to begin May, 2004. Completion date is anticipated for 2005.	\$	2,091

<sup>&</sup>lt;sup>(1)</sup> Integrated Resource Planning (IRP) - A tool for looking ahead using environmental engineering, social, financial and economic considerations. Includes using the same criteria to evaluate both supply and demand options while involving customers and other stakeholders in the process.

## MAJOR 2004 CAPITAL PROJECTS (Thousands of Dollars)

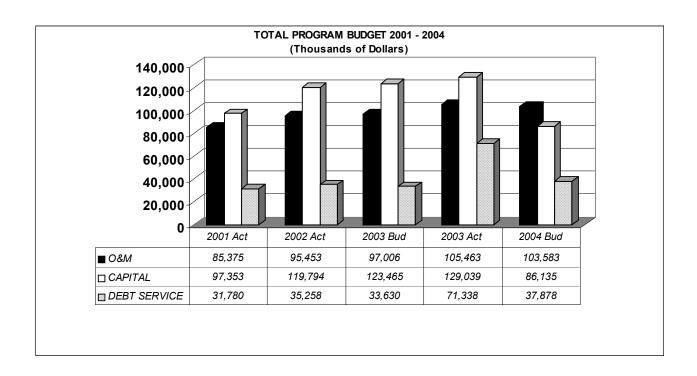
		2004 Capital
PROGRAM: DELIVERY	_	Budget
<b>Lower Chatfield Pump Station - Pump Station below Chatfield Dam</b> to deliver all available water in the reservoir to Conduit 20 at a maximum rate of 30 cfs. Additional pumping for .56 cfs into the Nevada Ditch will be included for use when the reservoir level is depleted below gravity flow level. Construction to begin September, 2004. Completion date is anticipated for May, 2005.	\$	2,415
<b>Eleven Mile Dam - Outlet Works Renovations</b> - Replace existing discharge valves, renovate building, and add valves for low flow discharges. Discharge valves to be order July, 2004. Construction to begin March, 2005. Completion date is anticipated for December, 2005.		2,015
Total Drought Related Projects	\$	4,430
<b>Automated Meter Reading -</b> Installation of equipment for implementation of automated meter reading throughout the entire Denver Water service area. The unit costs per meter are about \$200. Installation began March 1, 2001 with 29,021 completed in 2001, 53,144 completed in 2002, 70,480 completed in 2003 with 52,500 remaining for 2004 and 2005.	\$	10,065
<b>Main improvements and replacements -</b> Includes installation of new mains for looping and other systems improvements and replacement of deteriorated, obsolete and leaking mains under 24" in diameter. Continuous program.	\$	5,062
PROGRAM: GENERAL PLANT		
<b>Motor Vehicles &amp; Heavy Equipment -</b> 10 new & 13 replacement vehicles; 2 replacement heavy equipment purchases.	\$	3,244
<b>Capitalized Computer Systems and Equipment -</b> Centralized computer hardware is budgeted at \$2.1 million, centralized software \$325,000, PCs and related equipment at \$595,000, area network at \$197,000 and capitalized computer systems at \$6.4 million including \$3.9 million for the new Customer Billing System.		9,570
ALL OTHER CAPITAL EXPENDITURES*	-	14,088
TOTAL 2004 CAPITAL BUDGET BEFORE SUPPORTING ACTIVITIES(2)	\$	75,275
SUPPORTING ACTIVITIES	_	10,860
TOTAL 2004 CAPITAL BUDGET*	\$_	86,135

<sup>&</sup>lt;sup>(2)</sup>Note: There are 240 projects in the 2004 Capital Work Plan. The 12 projects shown constitute 81% of the budget for total projects before the addition of supporting activities to Capital. \*Includes the historical timing adjustment of \$4,957,000.

### **Program Budget Expenditures Summary**

The graph below shows the historical trend of operation and maintenance, capital and debt service expenditures summarized by program on page 57. Increases in operation and maintenance expenditures reflect the new Recycled Water Plant beginning operation in the spring of 2004, continued increasing costs for water treatment, environmental compliance related activities and drought related response and rebate expenditures during 2002 and 2003.

The high level of capital expenditures in 2003 reflects \$53.2 million for design and construction of the Recycled Water Plant and Distribution System project, \$11.7 million for Marston Treatment Plant upgrades to comply with Federal and State regulations, \$14.5 million for Automated Meter Reading and \$3.9 million for new computer systems and hardware.



# Program Expenditures Summary 2001-2004 (Thousands of Dollars)

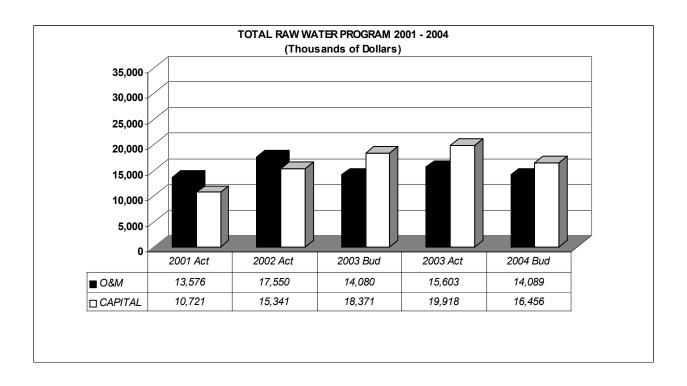
Program Elements	_	2001 Actual	_	2002 Actual	2003 Budget	_	2003 Actual	_	2004 Budget
Operation and Maintenance Programs: Raw Water Recycled Water Water Treatment Delivery General Plant	\$	13,576 0 17,894 41,355 12,550	\$	17,550 300 18,083 44,462 15,058	\$ 14,080 1,746 18,170 50,454 12,556	\$	15,603 1,153 20,369 54,724 13,614	\$	14,089 4,528 21,144 50,216 13,606
Total Operation & Maintenance Programs	\$	85,375	\$	95,453	\$ 97,006	\$	105,463	\$	103,583
Less: Allocated Supporting Activities	\$_	41,686	\$_	45,601	\$ 47,458	\$_	52,730	\$_	52,858
Total O & M Before Supporting Activities	\$_	43,689	\$_	49,852	\$ 49,548	\$_	52,733	\$_	50,725
Capital Programs: Raw Water Recycled Water Water Treatment Delivery General Plant Historical Timing Adjustment	\$	10,721 15,908 29,527 29,735 11,462	\$	15,341 31,467 27,330 30,724 14,932	\$ 18,371 54,898 14,682 32,177 11,337 (8,000)	\$	19,918 54,689 15,326 31,187 7,919	\$	16,456 17,010 4,789 34,718 18,119 (4,957)
Total Capital Programs	\$	97,353	\$	119,794	\$ 123,465	\$	129,039	\$	86,135
Less: Allocated Supporting Activities	\$_	9,750	\$_	10,711	\$ 11,023	\$_	10,935	\$_	10,860
Total Capital Before Supporting Activities	\$_	87,603	\$_	109,083	\$ 112,442	\$_	118,104	\$_	75,275
Subtotal Capital and O&M Before Supporting Activities	\$	131,292	\$	158,935	\$ 161,990	\$	170,837	\$	126,000
Subtotal Supporting Activities Allocated to Capital and O&M	\$	51,436	\$	56,312	\$ 58,481	\$	63,665	\$	63,718
Debt Service, Related Costs and Interest on Reserve Funds	\$	31,780	\$	35,258	\$ 33,630	\$	71,338	\$	37,878
Total Expenditures	\$	214,508	\$	250,505	\$ 254,101	\$_	305,840	\$	227,596

### **Raw Water Program**

This program contains all of the expenditures related to the operation and maintenance of raw water facilities from source to treatment such as collection systems, storage reservoirs, intakes, wells, ditches and canals. It also includes capital expenditures related to hydropower development, water rights acquisitions, ongoing raw water development, replacements and improvements to existing facilities and related activities. Total expenditures budgeted in 2004 for the Raw Water Program are \$30,545,000, comprised of \$14,089,000 for operation and maintenance and \$16,456,000 for capital.

Major 2004 capital expenditures include Gross Dam Hydropower development at \$2.2, gravel pit storage development of \$1.9 million and Integrated Resource Planning projects of \$3.5 million.

The graph below shows the historical trend of these expenditures. Operation and maintenance expenditures reflect the clean up and repair work in 2002 and 2003 resulting from the Hayman fire at \$2.9 million and \$662,000 respectively.



# Program: Raw Water 2001-2004 (Thousands of Dollars)

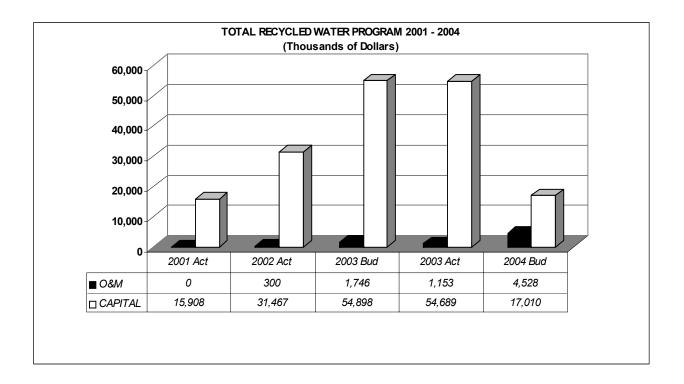
Program Elements	_	2001 Actual	_	2002 Actual		2003 Budget	_	2003 Actual	_	2004 Budget
Operation and Maintenance: Supervision and Engineering Storage Reservoirs Intakes, Wells, Ditches & Canals Supply Mains & Collection Systems Power Generation Resource Development, Planning & Ctrl Investigation & Development Source Watershed Protection	\$	298 1,858 851 1,027 583 852 566 215	\$	205 1,909 926 1,049 575 787 287 185	\$	246 2,057 902 984 488 1,022 147 225	\$	182 1,901 667 1,207 539 833 273 230	\$	303 1,897 1,007 1,070 462 963 224 249
Hayman Fire Rehabilitation	-	0	-	2,900	-	398	_	662	-	71
Subtotal	\$	6,250	\$	8,823	\$	6,469	\$	6,494	\$	6,246
Supporting Activities	_	7,326	_	8,727	-	7,611	_	9,109	_	7,843
Total Operation & Maintenance	\$_	13,576	\$_	17,550	\$	14,080	\$_	15,603	\$_	14,089
Capital:										
Water Rights Hydropower Development -	\$	1,801	\$	711	\$	563	\$	842	\$	624
Gross Dam Williams fork Winter Park Headquarters Relocation Gravel Pit Storage (IRP Project)		248 53 300 956		270 82 1,645 1,500		1,759 300 2,627 1,470		247 251 2,111 5,654		2,283 287 109 1,852
Integrated Resource Planning Gross ResOutlet Works Gates		2,475 591		1,293 436		1,074 2,325		1,484		3,533 550
Marston-Constr Multi Level Outlet Works Hayman Fire Rehabilitation Other Raw Water Improvements		57 0 976		0 8 1,997		133 1,748 705		3,435 0 1,333 383		0 658 1,466
Raw Water Modifications and Replacements		1,394		5,413		3,017		2,274		2,420
Subtotal	\$	8,851	\$	13,355	-	15,721	\$	18,014	\$	13,782
Supporting Activities	_	1,870	_	1,986	-	2,650	_	1,904	_	2,674
Total Capital	\$_	10,721	\$_	15,341	\$	18,371	\$_	19,918	\$_	16,456
Total Raw Water Expenditures	\$_	24,297	\$_	32,891	\$	32,451	\$_	35,521	\$_	30,545

### **Recycled Water Program**

This program includes the operation and maintenance and capital expenditures related to the recycling of water. Total 2004 expenditures for the Recycled Water Program are budgeted at \$21,538,000, comprised of \$4,528,000 for Operation and Maintenance and \$17,010,000 for capital.

Capital expenditures are for the design, engineering and construction of a treatment plant and distribution system. These facilities will serve recycled water to customers for irrigation, cooling systems and similar purposes. Phase I design of the project began in 1998. The 2004 budget includes \$16.3 for completion of Phase I construction of the Recycled Plant and the distribution system. Phase II construction to serve additional customers begins in 2005 and Phase III in 2010 with completion scheduled for 2013.

The graph below shows the Recycled Water Program from 2001 to 2004. Construction starting in 2001. The table on page 61 provides more detail information.



# Program: Recycled Water 2001-2004 (Thousands of Dollars)

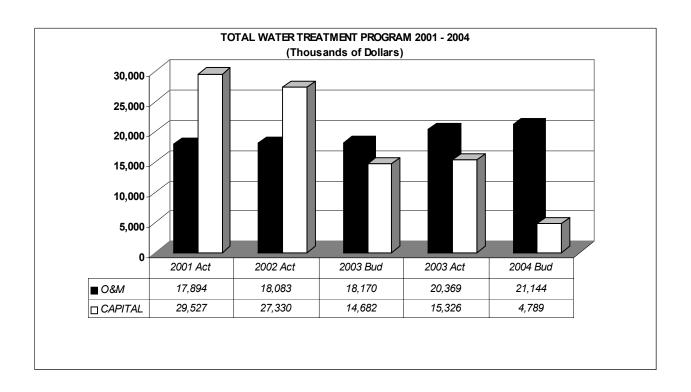
Program Elements	_	2001 Actual	_	2002 Actual	. <u>-</u>	2003 Budget	_	2003 Actual	_	2004 Budget
Operation and Maintenance: Recycled Water Plant	\$	0	\$	122	\$	619	\$	422	\$	2,906
,	_		_				_		_	
Subtotal	\$	0	\$	122	\$	619	\$	422	\$	2,906
Supporting Activities	_	0	_	178	-	1,127	_	731	_	1,622
Total Operation &										
Maintenance	\$_	0	\$_	300	\$	1,746	\$_	1,153	\$_	4,528
Capital:										
Recycled Water Distribution System	\$	392	\$	1,311	\$	14,407	\$	13,717	\$	5,654
Recycled Water Plant	_	14,576	_	29,308	-	39,521	-	39,456	_	10,652
Subtotal	\$	14,968	\$	30,619	\$	53,928	\$	53,173	\$	16,306
Supporting Activities	_	940	_	848	-	970	_	1,516	_	704
Total Capital	\$_	15,908	\$_	31,467	\$	54,898	\$_	54,689	\$_	17,010
Total Recycled Water Expenditures	\$_	15,908	\$_	31,767	\$	56,644	\$_	55,842	\$_	21,538

### **Water Treatment Program**

This program contains all expenditures related to the treatment of raw water, including operation and maintenance of the Moffat, Marston and Foothills water treatment plants, solids handling facilities and the Quality Control Laboratory, as well as capital expenditures for improvements, modifications and replacements to existing treatment facilities. Total 2004 expenditures for the Water Treatment Program are budgeted at \$25,933,000, comprised of \$21,144,000 for operation and maintenance and \$4,789,000 for capital.

The major 2004 capital expenditure is the construction of Marston Finished Water Improvements of \$2.1 million. Approximately \$190,000, or 4.3% of the 2004 capital water treatment expenditures, are related to meeting Federal, State and local regulations.

The graph below shows the historical trend of these expenditures. The high level of capital expenditures for 2001 and 2002 reflect construction of disinfection facilities and other upgrades needed to meet Federal and State water quality regulations at Marston, Moffat and Foothills. The table on page 63 provides more detail information.



# Program: Water Treatment 2001-2004 (Thousands of Dollars)

Program Elements	_	2001 Actual	_	2002 Actual	. <u>-</u>	2003 Budget	_	2003 Actual	2004 Budget
Operation and Maintenance:									
Supervision and Engineering	\$	205	\$	214	\$	298	\$	240 \$	314
Treatment Plants		8,402		8,106		7,668		8,734	8,723
Water Quality Laboratory	_	1,658	_	1,535	_	1,544	_	1,536	1,751
Subtotal	\$	10,265	\$	9,855	\$	9,510	\$	10,510 \$	10,788
Supporting Activities	_	7,629	_	8,228	<u> </u>	8,660	_	9,859	10,356
Total Operation &									
Maintenance	\$_	17,894	\$_	18,083	\$_	18,170	\$_	20,369 \$	21,144
Capital:									
Moffat Modifications & Improvements	\$	29	\$	0	\$	0	\$	0 \$	0
Moffat Disinfection Improvements		27		0		0		0	0
Marston Modifications & Improvements		10,057		18,504		11,396		11,732	2,236
Marston Disinfection Improvements		4		0		0		0	0
Foothills Modifications & Improvements		117		0		0		0	562
Foothills Disinfection Improvements		15,486		5,946		0		163	0
Other Treatment Improvements	_	1,327	_	1,636	_	2,388	_	2,516	1,604
Subtotal	\$	27,047	\$	26,086	\$	13,784	\$	14,411 \$	4,402
Supporting Activities	_	2,480	_	1,244	_	898	_	915	387
Total Capital	\$_	29,527	\$_	27,330	\$_	14,682	\$_	15,326 \$	4,789
Total Water Treatment									
Expenditures	\$_	47,421	\$_	45,413	\$_	32,852	\$_	35,695 \$	25,933

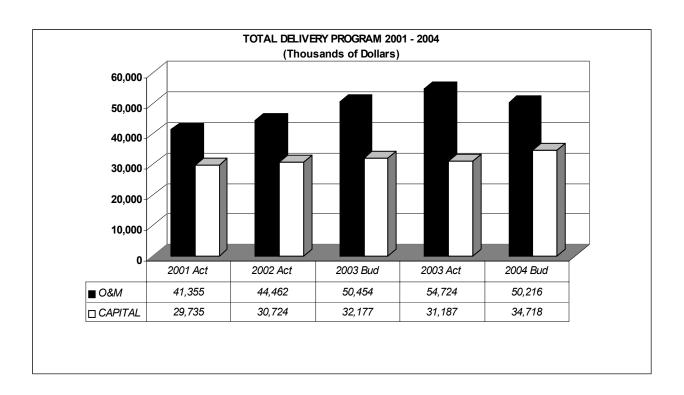
### **Delivery Program**

This program contains all expenditures relating to the delivery of water from the treatment plants to customers, including such items as operation and maintenance of pumping facilities and treated water storage facilities, maintenance of transmission and distribution mains, service lines, fire hydrants, conservation activities, customer services, billing and collection. Total 2004 budgeted expenditures are \$84,934,000, comprised of \$50,216,000 for operation and maintenance and \$34,718,000 for capital. \$2.0 million of the capital expenditures will be reimbursed through participation receipts. (See page 36, Participation Receipts.)

Major 2004 capital expenditures include \$10.1 million for Automated Meter Reading, \$4.9 million for drought related construction and \$11.9 million for main improvements and replacements.

Major operation and maintenance expenditures for 2004 are \$2.8 million for ongoing conservation rebates including commercial / industrial incentives and \$555,000 for cloud seeding and drought related activities. 2002 and 2003 drought response expenditures were \$1.4 million and \$4.1 million, respectively.

The graph below shows the historical trend of these expenditures. The operation and maintenance increases for 2002 and 2003 were due to drought response measures. The table on page 65 provides more detail information.



### Program: Delivery 2001-2004 (Thousands of Dollars)

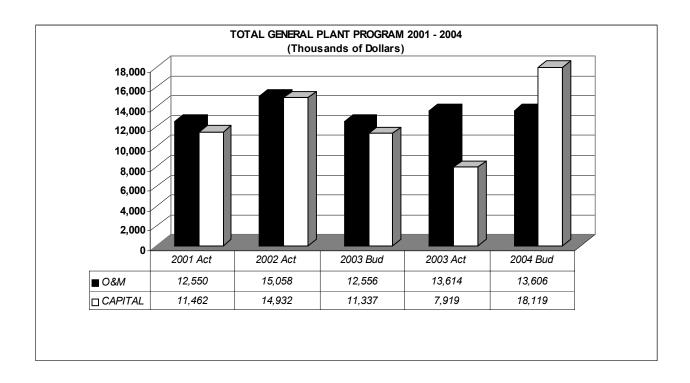
Program Elements	_	2001 Actual	_	2002 Actual	-	2003 Budget	_	2003 Actual	_	2004 Budget
Operation and Maintenance:										
Supervision and Engineering	\$	2,846	\$	2,871	\$	3,204	\$	2,787	\$	3,050
Pumping and Storage		3,917		3,096		3,271		3,330		3,515
Mains		4,355		4,745		4,505		4,661		4,722
Service Lines		187		177		171		188		205
Fire Hydrants		516		631		589		569		559
Conservation:		4.0=4		4.0==		4 000				. =
Ongoing Activities		1,074		1,277		1,380		999		2,762
Drought Response		0		1,409		2,743		4,058		555
Rebates		0		162		2,962		3,615		7 440
Customer Services		6,146		6,651		6,523		6,515		7,418
Sprinkler & Domestic Service Connections, Decentralization Stations		1,031		1,278		1,048		1,464		1,349
Connections, Decentralization Stations	_	1,031	-	1,270	-	1,040	-	1,404	-	1,349
Subtotal	\$	20,072	\$	22,297	\$	26,396	\$	28,186	\$	24,135
Supporting Activities	_	21,283	_	22,165	-	24,058	· <u>-</u>	26,538	_	26,081
Total Operation &										
Maintenance	\$_	41,355	\$_	44,462	\$	50,454	\$_	54,724	\$_	50,216
Capital: Pumping and Storage: Chatfield Pump Station	\$	6	\$	0	\$	0	\$	0	¢	0
Colorow Reservoir	Ψ	585	Φ	3	Ψ	0	Ψ	0	Ψ	0
Diesel Engines/Var Frequency Mtrs		768		106		0		0		850
Other Pumping & Storage		1,787		1,772		3,059		1,643		1,248
Total Pumping and Storage	\$	3,146	\$	1,881	\$	3,059	\$	1,643	\$	2,098
Conduit Construction	•	F FC4	•	000	•	0.000	•	4 400	<b>.</b>	505
Conduit Construction	\$	5,564	Ф	636	ф	2,369	Ф	1,160	Ф	535 10.065
Automated Meter Reading Transmission & Distribution		6,229 10,670		11,322 10,514		10,963 5,437		14,478 5,689		10,065 11,859
Conservation:		10,070		10,514		5,757		3,003		11,009
Xeriscaping & Sources for Parks		406		343		27		17		541
Drought Response		0		863		5,098		2,876		4,873
g	-		-		-	0,000	-		-	.,
Subtotal	\$	26,015	\$	25,559	\$	26,953	\$	25,863	\$	29,971
Supporting Activities	_	3,720	_	5,165	-	5,224	_	5,324	_	4,747
Total Capital	\$_	29,735	\$_	30,724	\$	32,177	\$_	31,187	\$_	34,718
Total Delivery Expenditures	\$_	71,090	\$_	75,186	\$	82,631	\$_	85,911	\$_	84,934

### **General Plant Program**

This program contains all expenditures related to the operation and maintenance, construction and acquisition of general plant and equipment, including the Administration Building, West Side buildings and grounds, vehicles, heavy equipment, telemetering and computer-related items. Total 2004 expenditures budgeted for General Plant is \$31,725,000 comprised of \$13,606,000 for operation and maintenance and \$18,119,000 for capital.

Major 2004 capital expenditures include \$3,244,000 for purchase of motor vehicles and heavy equipment, and \$9,570,000 for mainframe, personal computers, network equipment, new facilities mapping, Customer Information System and other computer systems.

The graph below shows the historical trend of these expenditures. 2002 includes higher expenditures for the purchase of additional new computer systems and hardware. It also includes purchase of property for relocation of Wynetka Decentralization Station. 2004 includes higher expenditures related to the Customer Information System (CIS) of \$3.9 million, GIS system of \$1.0 million and centralized hardware of \$2.1 million. 2002 operation and maintenance expenditures include \$1.8 million for security related activities resulting from September 11, 2001. The table on page 67 provides more detail information.



### Program: General Plant 2001-2004 (Thousands of Dollars)

Program Elements	_	2001 Actual	_	2002 Actual	_	2003 Budget	_	2003 Actual	_	2004 Budget
Operation and Maintenance: West Side Complex Kassler Center Motor Vehicle & Equipment Radio System & Telemetering Environmental Compliance Safety & Security Related (1) Small Tools & Other Items	\$	1,681 115 2,410 1,365 665 330 536	\$	1,498 129 2,385 1,630 685 1,798 630	\$	1,866 82 2,128 1,450 482 25 521	\$	1,564 \$ 96 2,486 1,467 535 346 627	<b>5</b>	1,802 82 2,362 1,522 323 8 551
Subtotal	\$	7,102	\$	8,755	\$	6,554	\$	7,121	\$	6,650
Supporting Activities	_	5,448	_	6,303	_	6,002	_	6,493	_	6,956
Total Operation & Maintenance	\$_	12,550	\$_	15,058	\$_	12,556	\$_	13,614	\$	13,606
Capital: West Side Complex Kassler Center Decentralization Stations Motor Vehicles & Heavy Equip Computer Systems & Equipment Communications, Office & Specialized Equipment Control Instrumentation & Telemetering Security Upgrades at Various Facilities Other	\$	3,607 286 66 2,944 3,024 635 16 0	\$	1,952 123 1,882 2,316 5,592 926 100 573 0	\$	379 72 10 937 7,305 509 246 598 0	\$	342 \$ 137 98 1,188 3,880 460 276 227 35	<b>—</b>	611 321 195 3,244 9,570 742 220 868 0
Subtotal	\$	10,722	\$	13,464	\$	10,056	\$	6,643	\$	15,771
Supporting Activities	_	740	_	1,468	_	1,281	_	1,276	_	2,348
Total Capital	\$_	11,462	\$_	14,932	\$_	11,337	\$_	7,919	\$	18,119
Total General Plant Expenditures	\$_	24,012	\$_	29,990	\$ <u>_</u>	23,893	\$ <u>_</u>	21,533	\$ <u></u>	31,725

<sup>&</sup>lt;sup>(1)</sup> Starting in 2003, safety and security expenditures have been charged directly the facilities concerned

### **Supporting Activities**

Each of the major programs contains a program element called supporting activities. This is an allocation of general and administrative expenditures that are not directly related to a particular program. These supporting activities can be characterized as indirect expenditures. A detailed listing of all of the supporting activities and their subsequent allocation to capital and operation and maintenance categories, along with further allocation to each of the major programs, is contained below.

# Program Element: Supporting Activities 2004 (Thousands of Dollars)

Total 2004 Allocated To Budget O & M Capital Supporting Activities: Administration \$ 24,538 \$ 20,356 \$ 4,182 **Employee Benefits** 36,159 29,996 6,163 Warehouse - Yards 827 686 141 218 Maintenance Shops 1,281 1,063 Gen. Liability & Other Ins. 650 539 111 Other\* 263 218 45 63,718 \$ 52,858 \$ 10,860 **Total Supporting Activities** 

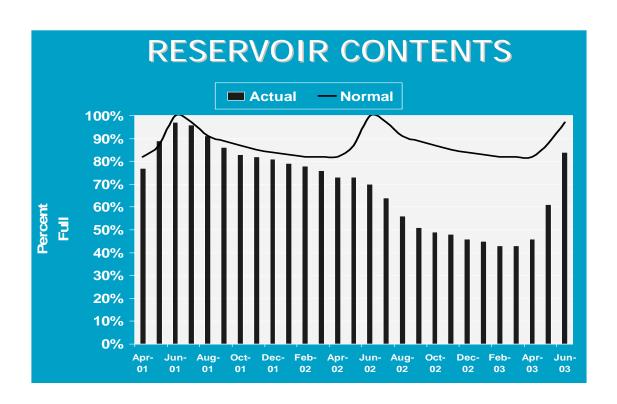
### Summary of Allocation Of Supporting Activities to Programs

Operation and	Raw Water	Recycled Water	Water Treatment	Delivery	General Plant	2004 Total
Maintenance	\$ 7,843	\$ 1,622	\$ 10,356	\$ 26,081 \$	6,956	\$ 52,858
Capital	2,674	704	387	4,747	2,348	10,860
Total	\$ 10,517	\$ 2,326	\$ 10,743	\$ 30,828 \$	9,304	\$ 63,718

<sup>\*</sup> Includes Stores Issue and other adjustments including refunds to customers.



Boaters returned to Dillon Reservoir for the summer of 2003 following a winter of increased snowfall in the mountains, and a spring blizzard that brought Denver Water reservoir water levels to more than 86 percent of normal by July. In April, prior to the blizzard, levels were at 45 percent of normal. Denver Water continued water restrictions and usage surcharges through the summer of 2003 despite improving conditions. The restrictions and surcharges, along with cooperation from Denver Water customers, reduced water usage by 24 percent.



Increased mountain snowfall during the winter of 2003, and a spring blizzard, returned Denver Water reservoir levels to within 86 percent of normal by July.

### **Section 4 - Expenditures by Type of Expenditure**

### Type of Expenditure Summary

In this section, total 2004 budgeted expenditures of \$227,596,000 have been placed into categories that describe what these expenditures purchase. Each category accumulates expenditures for the particular type of purchase regardless of program or whether the expenditure is for operation and maintenance or for capital.

Page 72 of this section provides summary data for expenditures by type. Pages 73 through 84 provide detailed information on the number of employees and history of divisional explanations. The following is a brief description of each of the line items appearing on page 72.

### **Gross Payroll**

Budgeted 2004 gross payroll is \$63,680,000, an increase of \$4.2 million over 2003 actual gross payroll. The increase reflects an average overall budgeted wage and salary increase of 2.3% that went into effect January 2004 and, budgeting for fifty-two unfilled and eight net new regular positions at the time the Payroll Budget was developed.

The authorized 2004 proposed regular and introductory number of employees of 1095.0 is eight more than authorized for 2003. This is fourteen positions less than the authorized high point of 1,109 authorized in 1991. The Manager and Staff Division is adding a new Human Resource Specialist to work with the HR PeopleSoft system and automation of the employee evaluations, and the Finance Division is adding one new accountant to help with the plant analysis workload. The Operation and Maintenance Division is adding a new T & D crew of six as a response to increased work loads, a journeyman assistant in the Metal Shop, and a water system operator. Seven meter reading positions are being deleted in the Public Affairs Division as a result of the Automated Meter Reading Project. One customer service field representative will be added for conservation water audits and three customer service specialists are being added for logging in new customers, the AMR project, monthly billing and the call center. The remainder is due to employees going from part-time to full-time status. Please see page 76 for a complete list of all positions additions and deletions.

A summarized organization chart that shows reporting relationships can be found on page 77. A comparison of authorized 2003 and 2004 number of employees for regular, introductory, temporary, project, casual and part-time employees are shown on page 74.

### **Employee Benefits**

Employee benefits for 2004 are budgeted at \$26,465,000, a decrease of (\$668,000) below 2003 actual expenditures. The decrease is substantially due to anticipated lower Workers Compensation costs (\$596,000). Approximately 13% of Health and 29% of dental insurance costs are expected to be paid by employees.

### **Materials and Supplies**

Budgeted 2004 materials and supplies are \$21,561,000; a decrease of \$3.6 million from 2003. This is substantially due to the timing of purchases of meters, electronic meter reading devices (ERTS) and related materials and supplies for the Automated Meter Reading project of (\$4.3 million) partially offset by \$690,000 for materials to be used in operating and maintaining the new Recycled Water Plant.

### **Outside Services**

Budgeted outside services for 2004 total \$42,701,000, including utilities and power for pumping, professional (consultant), and other services.

The 2004 budget includes \$5,351,000 for utilities and pumping power a decrease of \$386,000 from 2003. This is substantially due to projected utilities for the new Recycled Water Plant of \$854,000 partially offset by unbudgeted expenditures of \$605,000 for treatment by Centennial Water and Sanitation District of Chatfield Reservoir water that became available in 2003.

The professional services budget of \$11,716,000 is a \$21,000 increase over 2003. The small increase is due to the Moffat Collection System Project of \$1.4 million and security related expenses for the new Recycled Water Plant of \$305,000, substantially offset by the GIS and CIS computer systems of (\$1.1 million) and drought response related activities of (\$629,000).

Other services budgeted at \$25,634,000 for 2004 includes such items as computer software and maintenance, employee training, books and subscriptions, postage, equipment rental and contracted maintenance. The \$6.7 million increase over 2003 is substantially due to capitalized computer systems and equipment of \$5.0 million and main improvements of \$1.0 million. Capitalized computer systems and equipment include the new Customer Information System (CIS) \$2.5 million, GIS System \$806,000 and centralized computer hardware \$1.1 million.

### **General Equipment**

Purchases of equipment during 2004 are budgeted at \$4,455,000 mostly for purchasing vehicles, heavy equipment and computer equipment. This is a \$2.9 million increase over 2003 primarily due to delays in purchasing motor vehicles and heavy equipment in 2003 due to drought related expenditure reductions.

### **Construction Contract Payments**

This category includes payments for construction work and major material purchases under contract, purchase of water rights and acquisition of rights-of-way. These payments, budgeted at \$34,233,000 for 2004, are substantially due to Recycled Water Plant and Distribution System project construction of \$14.3 million, Marston Treatment Plant finished water improvements of \$2.0 million, Chatfield Pump Station of \$2.0 million, Eleven Mile outlet works renovation of \$1.9 million and gravel pit storage projects of \$1.2 million.

### Refunds

Refunds consist primarily of system development charge and customer account refunds. The 2004 budget project refunds of \$373,000, a decrease of \$164,000 from 2003 actual.

### **Debt Service**

Debt Service includes principal and interest payments for General Obligation Bonds, Revenue Bonds, Certificates of Participation and the Wolford Mountain Reservoir capital lease. Debt Service for 2004 is budgeted to be \$38,146,000. See section 6, pages 89 - 95 for additional information. In the past Denver Water relied on General Obligation Bonds. However, in 2002 the City Charter was changed to remove Denver Water's authority to issue General Obligation Bonds.

Total principal maturing and interest due in 2004 is as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
General Obligation Bonds	\$7,465,000	\$7,578,000	\$15,043,000
Revenue Bonds	6,445,000	6,324,000	12,769,000
Certificates of Participation	4,605,000	2,729,000	7,334,000
Wolford Mountain Reservoir			
Capital Leases	1,020,000	1,980,000	3,000,000
Total Debt Service	<u>\$19,535,000</u>	<u>\$18,611,000</u>	<u>\$38,146,000</u>

### Other

Other includes such items as claims, taxes collected on meter and materials sales, adjustments and expenditures not included in the above categories. The (\$4,018,000) budgeted for 2004 includes a reduction to the 2004 Capital Budget to reflect estimated Historical Timing Adjustment (HTA), of (\$4,957,000), partially offset by conservation incentives \$762,000 and insurance related claims of \$250,000. The 2004 HTA reduction is an estimate of budget variances resulting from changes in capital construction schedules and the timing of obtaining permits and acquiring rights-of-way. It is based on a comparison of actual to budgeted capital expenditures over several previous years.

# Comparison of Expenditures by Type of Expenditure 2001 - 2004

(Thousands of Dollars)

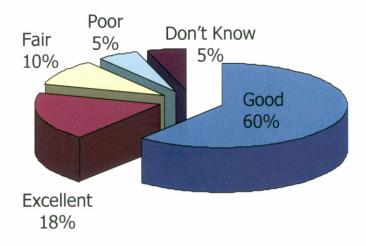
	-	2001 Actual	_	2002 Actual	_	2003 Budget	_	2003 Actual	_	2004 Budget
Gross Payroll	\$	54,562	\$	59,123	\$	59,135	\$	59,472	\$	63,680
Employee Benefits		18,904		22,291		23,926		27,133		26,465
Materials and Supplies		21,640		24,306		21,456		25,157		21,561
Outside Services:										
Utilities & Pumping Power	\$	5,508	\$	4,724	\$	4,262	\$	5,737	\$	5,351
Professional Services		13,197		13,231		10,034		11,695		11,716
Other Services	-	18,990	_	21,193	_	20,439	_	18,920	_	25,634
Subtotal Outside Services	\$	37,695	\$	39,148	\$	34,735	\$	36,352	\$	42,701
General Equipment		3,265		3,237		1,952		1,511		4,455
Construction Contract Payments		47,823		67,920		83,623		80,072		34,233
Refunds		1,038		772		343		537		373
Debt Service		31,449		35,194		33,405		70,853		38,146
Other	-	(1,868)	_	(1,486)	_	(4,474)	_	4,753	_	(4,018)
Total Expenditures	\$	214,508	\$_	250,505	\$ <u>_</u>	254,101	\$_	305,840	\$_	227,596



Denver Water inspectors kept a close eye on both commercial and residential water users as Denver Water managed through the drought in the summer of 2003. Denver Water assigned 30 full-time inspectors who issued a total of 5,300 warnings and tickets, 324 fines (ranging from \$250 to \$1,000) which generated \$99,826 in revenue. While penalties were handed out to repeat offenders, the main objective was to help educate Denver Water customers about the restrictions and the severity of the drought.

A survey of Denver Water customers indicated that 78 percent of those polled felt Denver Water had done an excellent or good job of managing through the drought. Only five percent of those surveys indicated they thought Denver Water had done a "poor" job reacting to the drought.

Would you say the job Denver Water has done managing to the drought has been, excellent, good, fair, poor?



Denver Water customers polled supported Denver Water's management through the drought.

### **Section 5 - Organization**

Denver Water is governed by the Board of Water Commissioners. The five Water Commissioners are appointed by the Mayor of Denver to staggered six-year terms. The Manager of Denver Water is appointed by the Board and is "discretionary." In general, "discretionary" means that the Manager holds "executive discretion" and serves solely at the pleasure of the Board. The Manager appoints the Division Directors, who manage the divisions. The Directors also are discretionary and report directly to the Manager.

Organizationally, Denver Water is divided into seven divisions, which are then further defined into sections. The 2004 budgeted Table of Organizations shown on page 74. Divisional summaries of the number of employees and expenditures by division are shown on pages 78 through 84.

### Regular and Introductory Employees by Division

## Regular and Introductory Employees (As of December 31, 2001 – 2004)

Division	2001	2002	2003	2003	2004
	<u>Actua</u> l	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Manager & Staff Public Affairs Legal Finance Engineering Planning Operations & Maintenance	91.8	97.8	104.0	102.6	106.5
	151.8	149.3	150.4	147.8	147.8
	13.5	13.5	13.6	12.5	13.6
	56.0	55.0	56.0	55.0	57.0
	131.0	134.0	135.0	129.6	135.0
	41.4	42.4	45.1	42.4	45.1
Totals Authorized	1,026.0	1,036.0	1,087.1	1,041.9	1,095.0
	1,060.1	1,062.4	1,087.1	1,087.1	1,095.0
Difference	-34.1	-26.4	N/A	-45.2	N/A

## 2004 Budgeted Table of Organization (Comparison with 2003)

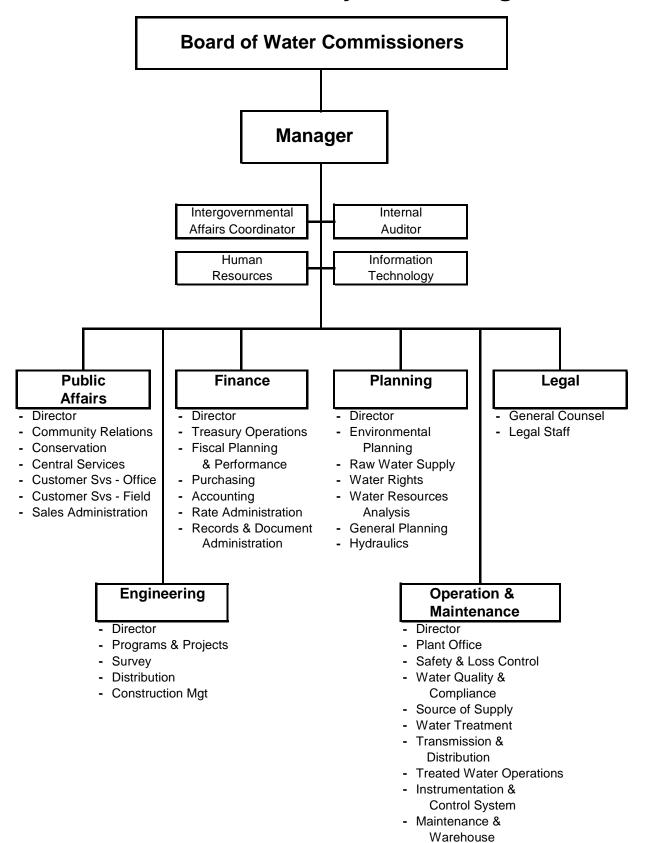
	Reg	jular-Introc	luctory St	aff	Tem		2004 ary and Project Staff		
Divisions/Sections	2003 Actual	2003 T. O.	2004 T. O.	Change in T.O.s	Temp- orary	Proj Temp	Casual Part- Time	Budget Total	
Manager & Staff Division									
Manager and Staff	13.0	13.0	14.0	1.0	_	_	-	_	
Information Technology	61.8	64.0	64.0	0.0	_	12.0	-	12.0	
Human Resources	27.8	27.0	28.5	1.5	-	1.6	-	1.6	
Total Manager & Staff Division	102.6	104.0	106.5	2.5	0.0	13.6	0.0	13.6	
Public Affairs Division									
Director of Public Affairs	7.0	7.0	6.0	-1.0	-	-	-	-	
Community Relations	5.2	4.8	5.2	0.4	-	-	1.0	1.0	
Conservation	12.0	10.0	12.0	2.0	-	-	-	-	
Central Services Customer Services - Office	3.0 35.0	3.0	3.0 35.0	0.0	_	-	-	-	
Customer Services - Office Customer Services - Field	75.0	32.0 82.0	75.0	3.0 -7.0	_	4.0	-	4.0	
Sales Administration	10.6	11.6	11.6	0.0	_	1.0	-	1.0	
Total Public Affairs	10.0	11.0	11.0	0.0	<u> </u>	1.0		1.0	
Division	147.8	150.4	147.8	-2.6	0.0	5.0	1.0	6.0	
Legal Division	12.5	13.6	13.6	0.0	-	-	2.0	2.0	
Finance Division									
Director of Finance	9.0	9.0	9.0	0.0	_	_	-	_	
Treasury Operations	5.0	5.0	5.0	0.0	_	_	_	_	
Fiscal Planning & Performance	4.0	5.0	5.0	0.0	_	-	-	-	
Purchasing	8.0	8.0	8.0	0.0	-	-	-	-	
Accounting	19.0	19.0	20.0	1.0	1.0	-	-	1.0	
Rate Administration	2.0	2.0	2.0	0.0	-	-	-	-	
Records & Document Admin.	8.0	8.0	8.0	0.0		2.0		2.0	
Total Finance Division	55.0	56.0	57.0	1.0	1.0	2.0	0.0	3.0	
Engineering Division									
Administration	8.6	9.0	9.0	0.0	_	_	_	_	
Programs & Projects	37.0	37.0	37.0	0.0	1.0	-	4.0	5.0	
Survey	25.0	26.0	26.0	0.0	2.0	-	6.0	8.0	
Distribution	37.0	40.0	40.0	0.0	-	2.0	7.0	9.0	
Construction Management	22.0	23.0	23.0	0.0	1.0	1.0	3.0	5.0	
Total Engineering Division	129.6	135.0	135.0	0.0	4.0	3.0	20.0	27.0	
	, , , ,								

## 2004 Budgeted Table of Organization (Comparison with 2003)

	Regular-Introductory Staff				Tem	2004 Temporary and Project Staff		
Divisions/Sections	2003 Actual	2003 T. O.	2004 T. O.	Change in T.O.s	Temp- orary	Proj Temp	Casual Part- Time	Budget Total
Planning Division								
Director of Planning	3.0	4.0	4.0	0.0	-	-	-	-
Environmental Planning	4.6	4.6	4.6	0.0	-	-	-	-
Raw Water Supply	6.0	6.0	6.0	0.0	-	-	1.0	1.0
Water Rights	7.0	7.5	7.5	0.0	-	-	-	-
Water Resources Analysis	10.8	11.0	11.0	0.0	-	-	1.0	1.0
General Planning	4.0	5.0	5.0	0.0	-	-	-	-
Hydraulics	7.0	7.0	7.0	0.0	-	<u>-</u>	5.0	5.0
Total Planning Division	42.4	45.1	45.1	0.0	0.0	0.0	7.0	7.0
Operations and Maintenance Division								
Plant Office	4.0	5.0	5.0	0.0	_	_	_	_
Water Quality & Compliance	31.0	33.0	32.0	-1.0	3.0	-	-	3.0
Safety and Loss Control	12.0	12.0	12.0	0.0	-	-	_	-
Source of Supply	59.0	62.0	62.0	0.0	24.0	2.0	-	26.0
Water Treatment	79.0	87.0	87.0	0.0	-	-	2.0	2.0
Transmission & Distribution	158.0	169.0	175.0	6.0	-	-	-	-
Treated Water Operations	59.0	61.0	62.0	1.0	-	-	3.0	3.0
Instrumentation & Ctrl Systems	21.0	21.0	21.0	0.0	-	-	-	-
Maintenance and Warehouse	129.0	133.0	134.0	1.0	-	-	9.0	9.0
Total Operations &								
Maintenance Division	552.0	583.0	590.0	7.0	27.0	2.0	14.0	43.0
Total All Divisions	1,041.9	1,087.1	1,095.0	7.9	32.0	25.6	44.0	101.6

2004 - 2003 Budgeted Table of Organization Changes	
Divisions/Positions	Net Change
Manager & Staff Division	
Intergovernmental Affairs Coordinator (Manager & Staff) from Director of Public Affairs Human Resources Systems Specialist - NEW (Human Resources) Occupational Health Nurse II from Part-time to Full-time (Human Resources)	1.0 1.0 0.5 2.5
Public Affairs Division Intergovernmental Affairs Coordinator (Dir of Public Affairs) to Manager and Staff Community Affairs Specialist III (Community Relations) - Part-time to Full-time Engineer III (Conservation) transfer from Water Quality and Compliance Customer Services Field Rep II - NEW (Conservation) Customer Services Specialist II - NEW (Customer Services - Office) Meter Readers - DELETE (Customer Services - Field)	(1.0) 0.4 1.0 1.0 3.0 (7.0) (2.6)
<b>Legal Division</b> No change in positions	0.0
Finance Division Accountant I - NEW (Accounting)	1.0 1.0
Engineering Division Recreation Site Coordinator - NEW (Distribution) Manager of Real Estate -DELETED (Distribution)	1.0 (1.0) 0.0
Planning Division No change in positions	0.0
	0.0
Operations and Maintenance Division  Equipment Operator II - NEW (Transmission & Distribution)  Equipment Operator IV - NEW (Transmission & Distribution)  Laborer - NEW (Transmission & Distribution)  Utility Worker II - NEW (Transmission & Distribution)  Mechanic II NEW (Transmission & Distribution)  Foreman - NEW (Transmission & Distribution)  Water System Operator I - NEW (Treated Water Operations)  Journeyman Assistant - NEW (Maintenance - Metal Shop)  Engineer III (Water Quality and Compliance) transferred to Conservation	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 (1.0)
Total Position Changes	7.9

### 2004 Denver Water Summary Table of Organization



### **Manager and Staff Division Summary**

#### **Activities**

This Division includes the Manager as Chief Executive for Denver Water. The Manager is also Secretary to the Board of Water Commissioners and custodian of all records. The six Division Directors report directly to the Manager. This Division also includes the Human Resources Section, Information Technology Section, and the Internal Auditing function. Human Resources is responsible for administering all aspects of Denver Water's employment, training, and compensation systems. Human Resources maintains Denver Water's Personnel Policies, is custodian of personnel records, administers the employee benefits, risk management, health promotion, disability management, and workers compensation programs. Human Resources is also responsible for recruitment and hiring, training, investigating employee complaints and administering programs related to small and disadvantaged businesses. The Information Technology Section is responsible for electronic communication, information systems, acquisition and maintenance of central computers and computer networks, telephone systems, information system management, purchase and support of personal computers, printers, and related equipment.

### **Key 2004 Objectives (See also Performance Measures)**

- 1. If the drought continues, advocate and implement conservation and water use limitations and, where appropriate, seek additional water supplies.
- Work to maintain existing water supply sources to serve Denver and combined service areas. Work to enhance supply options in order to serve the build-out of Denver and combined service areas. Cooperate with other regional water providers to better enable them to supply water to their customers, and enhance the supply available to Denver Water.
- 3. Maintain or improve existing relationships with water providers and distributors in the metropolitan area through the IRP and other cooperative methods and with water utilities and providers elsewhere in the region.
- 4. Monitor environmental and regulatory developments on the national and regional scene, and implement policy and operational changes where necessary to assure that Denver Water remains in compliance with all applicable laws.
- 5. Insure that Denver Water is managed in a cost effective, secure, efficient and customer-friendly manner.
- 7. Insure that the human resources of Denver Water are hired, managed, developed and retained in a manner that contributes to the effective and efficient operations of the Department and that reflects the diversity of the community in which we live.
- 8. Maintain all information systems so that information is provided in a timely and accurate fashion.
- Install and maintain information system hardware and software for financial, geographic information, facility management, accounting, warehousing and purchasing, and customer information systems, and insure that such systems are adequately maintained and upgraded as necessary.
- 10. Connect remote sites to the central data systems.
- 11. Maintain the computer and network infrastructure to support the growing volume of data traffic.
- 12. Maintain and enhance computer security as needed to meet Denver Water's business objectives.
- 13. Improve operational efficiencies and reduce costs by deploying technology solutions.
- 14. Operate a print and graphics shop.

### Regular & Introductory Employees (At End of Year)

	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Manager and Staff**	13.0	13.0	13.0	13.0	14.0
Human Resources	25.0	27.0	27.0	27.8	28.5
Information Technology*	53.8	57.8	64.0	61.8	64.0
Total	91.8	97.8	104.0	102.6	106.5

<sup>\*</sup> Four programmers from Records and Document Administration section and one IT manager position from the Director of Finance were transferred to the IT section at the beginning of 2002. The Print Shop section with four positions was transferred to the IT section, from Public Affairs Division January, 2003.

		2001	2002	2003	2003	2004
		Actual	Actual	Budget	Actual	Budget
Payroll	\$ _	7,085	8,223	8,525	8,750	9,854
Employee Benefits		10,068	10,724	11,085	12,938	12,910
Materials		1,705	1,226	915	1,181	896
Services		8,273	11,143	12,026	8,611	13,546
Equipment		212	486	672	192	869
Refunds		3	1	1	1	1
Other	_	8	20	40	7	60
Total	\$	27,354	31,823	33,264	31,680	38,136

<sup>\*\*</sup>Intergovernmental Affairs Coordinator position transferred to Manager and Staff in 2004.

### **Public Affairs Division Summary**

### **Activities**

The Public Affairs Division facilitates relationships with persons and entities outside of Denver Water. In that capacity, it responds to customer concerns and manages customer relations, maintains cooperative relationships with Denver City administration and governmental agencies whose sphere of operation affect Denver Water. Public Affairs coordinates the administration of distributor contracts and facilitate Denver Water's relations with its various publics. Responsibilities also include customer billing, meter reading and maintenance, water conservation, plan review, public relations activities.

### **Key 2004 Objectives (See also Performance Measures)**

- 1. Update conservation data and presentations.
- 2. Purchase and implementation of a new Customer Information System (CIS).
- 3. Complete radio drive-by automation of meters for residential customers.
- 4. Manage customer consumption if the current drought continues.

### Regular & Introductory Employees (At End of Year)

	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Director of Public Affairs*	7.0	7.0	7.0	7.0	6.0
Community Relations	4.7	4.7	4.8	5.2	5.2
Conservation	7.0	10.0	10.0	12.0	12.0
Customer Services	112.5	111.0	114.0	110.0	110.0
Sales Administration**	16.6	13.6	14.6	13.6	14.6
Print Shop***	4.0	3.0	N/A	N/A	N/A
Total	151.8	149.3	150.4	147.8	147.8

<sup>\*</sup>Intergovernmental Affairs Coordinator position transferred to Manager and Staff division in 2004.

	2001	2002	2003	2003	2004
	 Actual	Actual	Budget	Actual	Budget
Payroll	\$ 6,030	6,506	6,908	6,861	6,804
Materials	5,978	10,552	9,694	13,033	9,028
Services	2,544	4,383	5,544	5,452	5,515
Equipment	19	0	0	0	0
Contract Payments	1	0	0	50	0
Refunds	407	195	240	374	270
Other*	0	148	3,264	3,685	824
Total	\$ 14,979	21,784	25,650	29,455	22,441

<sup>\*\*</sup>Three positions in the Locates Section were transferred to T & D in 2002. Three positions in the Central Services Section are included in Sales Administration.

<sup>\*\*\*</sup> The Print Shop section with four positions was transferred to the Manager & Staff division, Information Technology section in January, 2003.

### **Legal Division Summary**

### **Activities**

The Legal Division represents and gives legal advice to the Board of Water Commissioners, the Manager and the various Divisions of Denver Water and handles all of its litigation. The types of litigation include water rights cases and diligence proceedings, administrative proceedings before State and Federal agencies, contract, civil rights and negligence cases, property suits and condemnations, and actions to recover Board charges and damages for injury to Board property and rights. In addition, the Legal Division represents Board interests in administrative hearings and appeals within Denver Water relating to personnel problems and customer complaints, reviews and advises upon matters of pending legislation, and prepares and reviews contract documents of all kinds.

### **Key 2004 Objectives (See also Performance Measures)**

- 1. Respond to evolving challenges to the yield and operating flexibility of Denver Water's system, including challenges presented by various permitting processes and water court proceedings.
- 2. Improve personnel-related practices and policies, including benefits, risk management, corrective action and medical issues.
- 3. Examine methods of protecting the urban reach of the South Platte River, including water court proceedings, water delivery, water quality protections and intergovernmental agreements.
- 4. Provide legal interpretation, drafting and negotiations services as needed to help Denver Water manage its operations under drought conditions.

### Regular & Introductory Employees (At End of Year)

regular & introductory Employees (F	at Elia of Teal				
	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Legal	13.5	13.5	13.6	12.5	13.6
Total	13.5	13.5	13.6	12.5	13.6

		2001	2002	2003	2003	2004
		Actual	Actual	Budget	Actual	Budget
Payroll	\$	956	1,035	1,019	1,015	1,076
Materials		4	2	4	3	5
Services		963	277	414	264	362
Contract Payments		32	0	0	0	0
Other		279	277	350	243	400
Total	\$ _	2,234	1,591	1,787	1,525	1,843

### **Finance Division Summary**

### **Activities**

The Finance Division is responsible for the planning, management and budgeting of Denver Water's financial resources, including acting as the disbursing authority for the Manager and custodian of the Department's documents and records. Major functional areas include accounting, treasury, long range financial planning, annual budgeting, water rate administration, purchasing and records and document management.

### **Key 2004 Objectives (See also Performance Measures)**

- 1. Maintain financial stability and financial preparedness, including the development of long term financial plans, and ongoing and frequent financial or management reports.
- Work with all divisions to control expense levels, and prepare financially for the potential continuation of drought conditions.
- 3. Perform annual development and review of financial plan, rates, other fees, financial statements, and annual budget.
- 4. Investigate methods to improve electronic business functions.
- 5. Advise the Board, as trustee of the Department's retirement plan, on the plan's performance issues .
- 6. Prudently manage the Board's outstanding debt assuring that all bond covenants are met.
- Provide high-quality records management services to Board in order to effectively leverage its information assets.

### Regular & Introductory Employees (At End of Year)

	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Director*	7.0	9.0	9.0	9.0	9.0
Treasury Operations	5.0	5.0	5.0	5.0	5.0
Fiscal Planning & Performance	4.0	4.0	5.0	4.0	5.0
Accounting	19.0	19.0	19.0	19.0	20.0
Rate Administration	2.0	2.0	2.0	2.0	2.0
Records & Document Admin.**	12.0	8.0	8.0	8.0	8.0
Purchasing	7.0	8.0	8.0	8.0	8.0
Total	56.0	55.0	56.0	55.0	57.0

<sup>\*</sup> In 2002 Director of Finance increaded by one Mgr of RDA plus one PC Support Technician.

		2001	2002	2003	2003	2004
		Actual	Actual	Budget	Actual	Budget
Payroll	\$	3,066	2,946	3,079	3,100	3,212
Employee Benefits		8,836	11,567	12,841	14,195	13,555
Materials		409	510	345	404	574
Services		1,081	586	780	1,541	800
Equipment		0	2	0	0	0
Refunds		614	77	102	142	102
Debt Service		31,449	35,194	33,405	70,853	38,146
Other		(952)	(50)	(127)	(527)	(345)
Total	\$ _	44,503	50,832	50,425	89,708	56,044

<sup>\*\*</sup> Records & Document Administration decreased by four employees in 2002 when these positions were transferred to Information Technology.

### **Engineering Division Summary**

### **Activities**

The Engineering Division is responsible for the design, construction, survey and related engineering aspects of physical additions, improvements and maintenance for the raw and treated water system. Engineering disciplines and related functions include civil, structural, construction, administration, electrical, mechanical, hydraulic, and dam safety. Recreation and property management activities are also assigned to Engineering. These include easement acquisitions and licensing activities for properties. Distribution system functions are included within Engineering Division responsibilities.

### **Key 2004 Objectives (See also Performance Measures)**

- 1. Complete a recycled water project and begin delivery of water to first customers in early 2004. Continue completion of distribution system to enable Stapleton, Lowry and others to begin receiving water by Load Season 2006.
- 2. Continue and expand past efforts to complete the large majority of projects in the 2004 Work Plan.

### Regular & Introductory Employees (At End of Year)

	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Director of Engineering	8.0	9.0	9.0	8.6	9.0
Programs and Projects	36.0	37.0	37.0	37.0	37.0
Survey	26.0	26.0	26.0	25.0	26.0
Distribution	39.0	39.0	40.0	37.0	40.0
Construction Management	22.0	23.0	23.0	22.0	23.0
Total	131.0	134.0	135.0	129.6	135.0

		2001	2002	2003	2003	2004
	_	Actual	Actual	Budget	Actual	Budget
Payroll	\$	7,236	8,148	8,492	8,320	8,477
Materials		679	370	649	344	682
Services		10,203	6,704	4,844	5,312	4,346
Contract Payments		46,531	66,403	83,606	79,765	34,137
Equipment		63	101	57	5	0
Refunds		13	24	0	19	0
Other		0	0	0	0	0
Total	\$	64,725	81,750	97,648	93,765	47,642

### **Planning Division Summary**

#### **Activities**

The Planning Division is responsible for identifying and integrating the future water and facilities needs and resources of Denver Water and determining and protecting options to meet those needs and resources. Planning is also responsible for coordinating outside pertinent activities with local, state, and federal agencies. It accomplishes this by providing demographic projections and raw and treated water consumption forecasts. It also develops long and short-range plans for facility development. Additionally, it also determines the water supply available, plans and controls daily operation of the water supply, plans for the construction of treated water transmission distribution, pumping and storage facilities, performs environmental planning, and plays a key role in the development, protection, and management of water rights.

### **Key 2004 Objectives (See also Performance Measures)**

- 1. Work with all Denver Water Divisions to address issues and problems occasioned by the possibilty of a continued drought, including forecasting the severity of the drought.
- Continue efforts to resolve the reliability and vulnerability problems on the north-end by completion of the Environmental Impact Statement (EIS) with the U.S. Army Corps of Engineers for the Moffat Collection System Project.
- 3. Plan for the treated water distribution system expansion.
- 4. Preserve Denver Water's ability to use its water resources by successfully addressing endangered species and other environmental concerns.
- 5. Preserve, protect, develop and utilize Denver's water resources to adequately serve our customers.

### Regular & Introductory Employees (At End of Year)

	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Director of Planning	3.0	3.0	4.0	3.0	4.0
Environmental Planning	4.4	4.6	4.6	4.6	4.6
Raw Water Supply	6.0	6.0	6.0	6.0	6.0
Water Rights	7.0	7.0	7.5	7.0	7.5
Water Resources Analysis	10.0	10.8	11.0	10.8	11.0
General Planning	4.0	4.0	5.0	4.0	5.0
Hydraulics	7.0	7.0	7.0	7.0	7.0
Total	41.4	42.4	45.1	42.4	45.1

	2001	2002	2003	2003	2004
	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 2,685	2,964	3,127	3,042	3,231
Materials	39	49	50	35	59
Services	1,483	1,590	2,241	3,179	4,433
Contract Payments	1,260	1,517	17	230	96
Equipment	6	6	6	0	0
Refunds		474			
Other	0	0	0	0	0
Total	\$ 5,473	6,600	5,441	6,486	7,819

#### **Operations and Maintenance Division Summary**

#### **Activities**

The Operations and Maintenance Division is responsible for operating and maintaining the physical plant of Denver Water. It establishes operating criteria for the proper operation of all plant facilities and maintains the Denver Water system to the satisfaction of outside agencies. Major functions include: monitoring and developing water quality control methods, diversion and storage of raw water supply; maintenance and operation of physical plant at various dams, reservoirs, hydro-turbines and water treatment plants; construction, maintenance and repair of transmission and distribution piping, appurtenances, and facilities; operation of the distribution system and supervision of process control; and coordination of Denver Water Safety and Security, Environmental Compliance Programs and Warehousing functions.

#### **Key 2004 Objectives (See also Performance Measures)**

- 1. Manage system for drought reductions.
- 2. Increase system reliability.
- 3. Continue security measures.
- 4. Improve reliability of Water Treatment Plants

#### Regular & Introductory Employees (At End of Year)

	2001	2002	2003	2003	2004
Section	Actual	Actual	Budget	Actual	Budget
Plant Office	5.0	5.0	5.0	4.0	5.0
Water Quality and Compliance	30.5	30.0	33.0	31.0	32.0
Safety & Loss Control	11.0	12.0	12.0	12.0	12.0
Source of Supply	61.0	60.0	62.0	59.0	62.0
Water Treatment	68.0	69.0	87.0	79.0	87.0
Treated Water Operations	59.0	58.0	61.0	59.0	62.0
Transmission & Distribution*	159.0	163.0	169.0	158.0	175.0
Instrumentation & Control	18.0	20.0	21.0	21.0	21.0
Maintenance and Warehouse	129.0	127.0	133.0	129.0	134.0
Total	540.5	544.0	583.0	552.0	590.0

<sup>\*</sup> Three Location section positions were transferred to Transmission & Distribution from Public Affairs in 2002.

#### **Expenditure History (Thousands of Dollars)**

		2001	2002	2003	2003	2004
		Actual	Actual	Budget	Actual	Budget
Payroll	\$ _	27,505	29,300	29,158	28,384	31,026
Materials		12,316	11,818	9,837	10,619	10,799
Services		13,148	14,466	8,885	11,993	13,699
Contract Payments		0	0	0	27	0
Equipment		2,965	2,642	1,217	1,310	3,586
Refunds		1	1	0	1	0
Other		(96)	4	0	0	0
Total	\$ <del>-</del>	55,839	58,231	49,097	52,334	59,110

#### **Divisional Reconciliation to Summary Totals**

The following table reconciles the Divisional Summary totals for each year to the total expenditures shown elsewhere in this document.

#### **Expenditure History (Thousands of Dollars)**

	-	2001	2002	2003	2003	2004
Division Name		Actual	Actual	Budget	Actual	Budget
Manager & Staff	\$	27,354 0	31,823 0	33,264 0	31,680	38,136
Public Affairs		14,979 0	21,784 0	25,650 0	29,455	22,441
Legal		2,234 0	1,591 0	1,787 0	1,525	1,843
Finance		44,503 0	50,832 0	50,425 0	89,708	56,044
Engineering		64,725 0	81,750 0	97,648 0	93,765	47,642
Planning		5,473 0	6,600 0	5,441 0	6,486	7,819
Operations & Maintenance.		55,839 0	58,231 0	49,097 0	52,334	59,110
Adjustments:						
Warehouse Purchases						
and Issues <sup>(1)</sup>		509	-221	-37	-459	-482
Cash Flow <sup>(2)</sup>		-1,108	-1,885	0	1,346	
Historical Timing Adjustment		0	0	-8,000	0	-4,957
Additional Vacancy Savings		0	0	-1,174	0	0
Total Expenditures	<b>\$</b>	214,508	250,505	254,101	305,840	227,596

Adjustments related to the timing of purchases and issues of warehouse stock.

Denver Water maintains a warehousing operation that purchases materials and supplies into stock.

These items are then issued and charged to jobs as needed. The Warehouse Purchases and Issues Adjustment is required to insure that the total of materials as issued balances to the amount of purchases made for warehouse stock.

<sup>(2)</sup> The Cash Flow Adjustment is the difference between expenditures as booked and disbursed. Expenditures are budgeted and reported on a modified accrual basis (as booked). Total expenditures are then converted to a cash basis (disbursed) for purposes of determining year-end designated balances.

DENVER WATER KEY PERFORMANCE MEASURES	Current Denver Water Goal	ACTUAL 2002	ACTUAL 2001	ACTUAL 2000	ACTUAL 1999	ACTUAL 1998	Div Resp For Performance
I. Provide Customers with High Quality Water	Goai	2002	2001	2000	1999	1996	Performance
E=External; I=Internal							
A. Unfavorable quality:							
E 1. Smell-taste-# of customer	00	405	70		07	400	0014
complaints per qtr E 2. Clarity - # of customer	< 36	125	78	55	37	133	O&M
complaints per quarter	< 36	15	75	19	47	70	O&M
E 3. Hardness-# of customer	1 00				''		- Cu
complaints per quarter	< 30	1	1	1	17	18	O&M
B. Meet or exceed key DW standards	< .1 NTU	0.04	0.04	0.04	0.04	0.04	O&M
I 1a. Turbidity - Foothills I 1b. Turbidity - Marston	< .1 NTU	0.04	0.04	0.04	0.04	0.04	O&M
I 1c. Turbidity - Moffat	< .1 NTU	0.05	0.05	0.06	0.06	0.05	O&M
I 2a. Fluoride - Foothills	.8 - 1.2mg/1	0.82	0.85	0.87	0.89	0.9	O&M
I 2b. Fluoride - Marston	.8 - 1.2mg/1	0.87	0.88	0.90	0.91	0.91	O&M
I 2c. Fluoride - Moffat	.8 - 1.2mg/1	0.83	0.80	0.89	0.85	0.85	O&M
I 3a. Chlorine Residual- Foothills I 3b. Chlorine Residual- Marston	1.1 - 1.5mg/1 1.1 - 1.5mg/1	1.54 1.54	1.43 1.51	1.48 1.49	1.44 1.41	1.38 1.41	O&M O&M
I 3c. Chlorine Residual- Marston	1.1 - 1.5mg/1 1.1 - 1.5mg/1	1.45	1.56	1.58	1.41	1.32	O&M
I 4a. pH - Foothills	7.5 - 8.0	7.8	7.8	7.8	7.8	7.8	O&M
I 4b. pH - Marston	7.5 - 8.0	7.7	7.7	7.8	7.9	7.8	O&M
I 4c. pH - Moffat	7.5 - 8.0	7.8	7.8	7.8	7.8	7.8	O&M
C. Meet or exceed mandated Federal stds		]			1		
Number of reportable violations	0	0	0	0	0	0	O&M
1. Number of reportable violations	Ŭ	Ŭ	Ŭ	Ŭ			Cairi
II. Provide Customers With Excellent Service							
A. Positive customer contact							
E Per customer service rep contact:	00	440.0	50.0	70.0	40.0	47.0	DUD
Length of time to answer phones     Length of time for problem-query	< 30 sec	112 Seconds	59 Seconds	76 Seconds	49 Seconds	47 Seconds	PUB
solution, requiring field ck.	< 48 hrs	42 Hours	42 Hours	42 Hours	42 Hours	36 Hours	PUB
E 3. Customer Satisfaction Survey							
Index Level (4.0 = Best) <sup>(1)</sup>	= or < 3.0	3.5	3.3	3.4	3.6	3.5	PUB
B. Reliable service							
E 1. Outages-average DW response time	< 20 mins.	<20 minutes	25 Minutes	24 Minutes	24 Minutes	23 Minutes	O&M
E 2. Disruptions-# of unplanned							
disruptions(main breaks)	208 Average	371	261	243	195	166	O&M
E 3. Disruptions - Avg time of duration E 4. # days involuntary restrictions	< 4 hours	7.0 Hours	7.0 Hours	6.5 Hours	7.5 Hours	6.0 Hours	O&M
E 4. # days involuntary restrictions (any part of day=1 day)	0	0	0	0	0	0	PLN
E 5. # Pressure Complaints per month	< 30	18	19	23	17	23	PUB
' '							
C. Rates are appropriate for service     E    1. Rates compared to metro water     utilities							
a. Inside Rates (1 = lowest Rate)	Lowest 25% of survey	2 of 16	3 of 19	3 of 19	2 of 19	2 of 19	ALL DIVS
b. Outside Rates (1 = Lowest Rate)	Lowest 50% of survey	2 of 11	2 of 12	2 of 12	2 of 12	2 of 12	ALL DIVS
D. System reliability - efficiency					1		
I 1. # days DW met minimum stream							
flow required	365/yr.	365	365	365	365	365	PLN
2. # of days did not exceed flow		1			1		
thresholds NF of So Platte due to DW operations (excl. water							
rights diligence opr)	365/yr.	365	365	365	365	365	PLN
I 3. # of days DW did not violate min.	303/y1.	303	303	303	303	303	LIN
pool requirements		1			1		
@Chatfield Res.(excl. those caused	005/						5
St.Eng.)	365/yr.	365	365	365	365	365	PLN
		1			1		
E. Treatment Plant Utilization		1			1		
I 1.Foothills(base load) % production to							
total water treated	65%	68.7%	57.0%	64.6%	75.5%	76.2%	O&M & PLN
I 2.Marston(peak load) % production to	450/	7.00/	10.40	47.50	44.50	0.007	0014 0 5: ::
total water treated I 3.Moffat(peak load) % production to	15%	7.6%	19.1%	17.5%	11.5%	6.6%	O&M & PLN
total water treated	20%	23.7%	23.9%	17.9%	13.0%	17.2%	O&M & PLN
F. Transmission & Distribution		1			1		
Inside Denver & Total Service:		<u> </u>				<u> </u>	

	DENVER WATER KEY PERFORMANCE MEASURES	Current Denver Water Goal	ACTUAL 2002	ACTUAL 2001	ACTUAL 2000	ACTUAL 1999	ACTUAL 1998	Div Resp For Performance
II. Prov	ide Customers With Excellent Service (co		2002	2001	2000	1000	1000	. on on mance
I	# main breaks per x miles of pipe per year     Ratio peak day to avg day delivery (10yr. Rolling Avg.)	<1 break per 10 miles pipe/ 2.5 rolling average	2.03	9.6 2.2	10.2 2.09	12.6 2.31	12.1 2.41	ENG,PLN,O&M
I	3. % pipe replaced per year	1.0%	0.42%	0.32%	0.61%	0.68%	0.70%	ENG,PLN,O&M
I	System Wide:  1. Unaccounted for water % of total total water delivered	5.0% (National Avg=0%)	3.46%	4.36%	2.87%	5.34%	6.64%	ENG,PLN,O&M
	rcise responsible stewardship of assets Facilities maintained properly							
1	Emergency Hrs. as % Preventative     Maint Hours <sup>(2)</sup>	8%	9.60%	10.50%	11%	13%	4%	O&M
-1	2.% O&M Div Overtime Hrs. to Total							
E	O&M Div. Hrs. 3. % of fire hydrants in service	< 3% 99.90%	6.3% 99.5%	6.1% 99.5%	5.5% 99.2%	5.7% 99.2%	5.3% 99.7%	O&M O&M
-	3. 70 of the Hydrants in Scivice	33.3070	33.370	33.370	33.270	33.270	55.7 76	Odivi
B. E/I	Conservation  1. Reduce avg. annual demand from 877 (1978 base year)GAD to 744 GAD by 1999 using 9-yr centered avg (GAD=Gal per Acct per day) per Foothills Stipulation Goals	<744 GAD by 1999	600	756	789	735	771.9	PLN & PUB
E/I	Avg. Conservation Dollars spent to	1744 OAD by 1000	000	7 50	700	733	771.5	LIVATOB
	Acre Feet Saved 3. % of single-family residential						('97-98)\$1584	
	customers with Xeriscape 4. Contact and evaluate the 100	Average of 33% by 2002	30%	30%	29%	28%	26%	PUB
	highest water users by 2002	100% by 2002	Completed	In Progress	Begin 2002	Begin 2002	Begin 2002	
C.   	Workforce is productive/effective 1.Retail Population served per employee 2.Retail Population served per core	678	Not available		723	704	687	ALL DIVS
	employee(O&M div)	1,307 Average	Not available	1,494	1,390	1,379	1,357	O&M
1	<ul><li>3.% Supervisors &amp; Managers Attending 1+Training Classes</li><li>4. % Non-Supv, Non-Mgr Attending 1or</li></ul>	100%	72%	73%	74%	68%	72%	ALL DIVS
	more Training Classes	75%	66%	65.20%	61.00%	63.00%	78.30%	ALL DIVS
1	5. % of supervisory employees to non- supv employees	1 to 10 FTE's	1:4.2	1:4.81	1:4.73	1:4.5	1:4.8	ALL DIVS
l ;	# lost time days due to injury per     per year     At fault vehicle accidents/million	not >75 days	138	136	165	127	126	ALL DIVS
	miles driven	not >12	3	21	27	18	15	ALL DIVS
-1	8. Gross Turnover Rate,incl. Retirements	5-8%	7.30%	7.3%	7.2%	7.3%	7.2%	ALL DIVS
D.	Operations are efficient  1. O&M Costs(incl.S.O.S) per (000)/Gal treated Water delivered	\$0.86 Average	\$1.09	\$1.07	\$0.98	\$1.04	\$0.89	ALL DIVS
1	2. O&M Costs(exclS.O.S) per (000)/Gal	Ф0.70 A	<b>***</b>	#0.0 <del>-</del>	<b>#0.0</b> 0	<b>#0.05</b>	00.04	ALL DO (C
1	treated Water delivered 3. Total operating expenses per	\$0.79 Average	\$0.95	\$0.97	\$0.90	\$0.98	\$0.84	ALL DIVS
1	connection 4. Salaries as % operating revenue	\$236.58 Average 40% Average	\$286.37 39.0%	\$313.32 35.0%	\$303.81 33.0%	\$293.62 38.0%	\$287.44 38.0%	ALL DIVS ALL DIVS
I	<ol> <li>Water Qual Cost per (000)/gal treated water delivered</li> </ol>	\$0.02 current year	\$0.020	\$0.020	\$0.016	\$0.018	\$0.016	ALL DIVS
į.	Water Quality tests performed	50,393.40 Average	39,859	34,035	41,846	57,661	53,521	O&M
1	<ol><li>% of water quality tests performed to of % tests required</li></ol>	100%	100%	100%	100%	100%	100%	O&M
1	8. Average annual regular pay per employee	DW step 5 approx. equal	\$50,673	\$47,822	\$46,130	\$45,046	\$44,010	ALL DIVS
l .	• •	to 50th percentile in Survey		'			'	
I	Comparable Benefits Per Annual Survey     a. Denver Water     b. Survey - Utilities, nationwide	Approx.= to Survey Avg	52.18% 44.60%	48.15% 45.62%	48.23% 45.93%	49.32% 43.60%	47.15% 47.10%	ALL DIVS ALL DIVS ALL DIVS

DENVER WATER KEY PERFORMANCE MEASURES	Current Denver Water Goal	ACTUAL 2002	ACTUAL 2001	ACTUAL 2000	ACTUAL 1999	ACTUAL 1998	Div Resp For Performance
III. Exercise responsible stewardship of asset	s (continued)						
<ul><li>E. Financial Stewardship</li></ul>							
<ol> <li>Optimal use of financial assets:</li> </ol>							
	AA	AA+	AA+	AA+	AA+	AA	FIN
I b) Operating ratio:							
3 Year Moving Average	= or < .60%	57.4%			58.5%	58.0%	FIN
2) Annual		62.7%	57.5%	52.2%	59.6%	57.8%	FIN
I c) Total Asset turnover:							
3 Year Moving Average	= or >.9%	11.0%	11.1%			11.0%	FIN
2) Annual				11.1%	10.8%	11.2%	
I d) Interest Coverage				l			
	> or = 2.5x	4.3	5.0	4.4	4.1	3.9	FIN
IV. Exercise creative stewardship of assets							
A. Work force is creative							
1.% regular employees submitting							
	10%	3%	3%	3%	3%	3%	ALL DIVS
I 2. % suggestions awarded for possible	1070	070	070	070	070	070	ALL DIVO
	15%	3%	3%	3%	4%	4%	ALL DIVS

Denver Water's performance measures are taken from its Mission Statement. Each of the four goals expressed in the Mission Statement was identified (shown in bold witrh roman numerals). Key measures were then developed from the perspective of external (customers, media, other than Denver Water) and internal (Denver Water managers, supervisrs, employees) to measure how well the goals were being met.

**FOOTNOTES:**(1) Comprised of referral calls to supervisor, average hold time, mail surveys, and payment goals met (2) 1999 higher due to break in Cond. 55;1997

higher due to break in Cond. 94

(3) Follows City's Credit Rating

DIVISION RESPONSIBLE:

ENG = Enginewering Divison

FIN = Finance Division

LGL = Legal Division

MGR(HR) = H\uman Resources Section

MGR = Manager and Staff Division

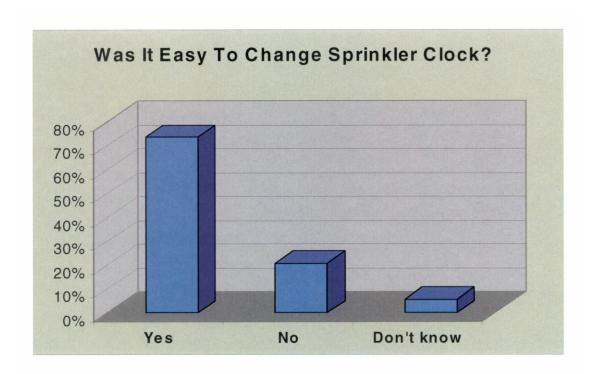
O&M = Operations and Maintenance Division

PLN = Planning Division
PUB = Public Affairs Division
ALL DIVS = All Divisions



More than half of Denver Water customers in single family homes have automated lawn sprinkler systems like the ones in this picture. Seventy percent of those customers said their systems were easy to re-set to accommodate watering restrictions. Of those, 80 percent said they re-programmed their own systems.

Managing through the drought, Denver Water reduced watering days and times for lawns of Denver Water customers. The restrictions, favored by 74 percent of those polled in the Denver Water Customer Survey, helped Denver Water to significantly reduce water usage during the summer of 2003.



Out of 800 Denver Water customers surveyed the vast majority said they found it easy to change their sprinkler system clocks to reduce watering times during the drought.

#### Section 6 – Debt Service and Obligations under Capital Leases

#### Introduction

During 2003 the Board reviewed its guidelines for the use of debt. The review was prompted by a voter-approved change to Section 10.1.15 the City Charter on November 5, 2002. The effect of the change was to remove the Board's ability to issue general obligation bonds on the credit of the City for water works purposes. The change also enabled the Board to issue water revenue bonds without future voter approval. In the past, voter approval was required for the sale of revenue bonds.

In mid-May 2003 the Board sold its first issue of water revenue bonds. The covenants included in that issue were used as a basis for the reissued debt guidelines which were adopted by the Board on May 28. Calculations showing historical and projected level of performance against the guidelines are shown on pages 92.

In the 2003 guidelines, the board reaffirms it's long-standing policy of using debt financing for system expansion and improvements and prohibiting its use for payment of operating and maintenance expenses. The Board also reaffirmed that its long-standing program of current refunding may be continued. However, the expectation is that the Board will be less likely to use the current refunding program in the future due to the greater flexibility gained in the 2002 City Charter amendment with respect to the sale of revenue bonds.

In the past, the Board has financed some capital improvements with capital leases. These facilities include certain improvements at the Marston and Moffat Treatment plants. This portion of the Board's capital leases were securitized using a Certificate of Participation (COP) structure. The Board also financed its future acquisition of 40% of the storage capacity and water rights at Wolford Mountain Reservoir with a capital lease. Although the use of capital leases is not prohibited in the revised debt guidelines, the expectation is that the Board will be less likely to use COPS in the future due to the greater flexibility it now has with respect to the sale of revenue bonds.

#### Denver Water Debt Guidelines

as adopted by the Board on May 28, 2003 - Item V-G-4

Denver Water will use the following guidelines to evaluate when and how to use debt financing in the future.

- 1. Debt proceeds may not be used to pay operating and maintenance expenditures.
- 2. Debt may be used only for refunding current maturities of existing debt (called *current refundings*), refunding future maturities of existing debt (*called advance refundings*) and for capital improvements.
- Current refundings will be structured so that the final maturity of the debt does not exceed the useful
  life of the asset. In addition, refundings will be structured to facilitate an orderly and regular retirement of debt and to comply with statutory regulations while taking advantage of favorable market
  conditions.

<sup>1.</sup> A COP is a bond-like security that represents the right to receive a defined amount of rental revenue from a specified lease arrangement. Legally, each year the Board decides whether to allocate funds for the lease payments. The annual nature of the lease obligation means that credit rating agencies and certificate holders must evaluate both the importance of the leased facility to the Board's operations and the credit history of the Board.

- 4. Advance refundings will be considered when the net present value savings on the bonds being refunded is greater than 3.0% and the refunding is permitted by existing statutory regulations; or if extraordinary circumstances exist, when the net present value of savings is sufficient to satisfy existing statutory regulations.
- 5. Capital improvements of a normal, recurring nature and amount will generally not be financed with debt. Rather, this type of improvement will be included in the calculation of the revenue requirement from rates. This will result in routine capital expenditures being financed internally on a "pay-as-yougo" basis.
- 6. Non-recurring capital projects that expand the system or that are otherwise unusual in nature or amount may be financed externally. Because capital outlays for projects of this type are often made in advance of growth in demand, repayment of debt used to finance such projects may be deferred until revenues begin to be collected.
- 7. As there is a limited pool of resources, whether from internal sources or from debt, each proposed capital improvement will be assessed within the context of how it impacts the reliability and integrity of the total system and whether it is consistent with Denver Water's mission and long-term goals. During the capital planning and budgeting process, projects will be ranked to determine which ones are most essential to meet the Board's overall objectives. Projects that are ranked highest will then be reviewed with respect to appropriateness for external financing. An assessment of the impact on Denver Water's bond rating given the availability and cost of external financing will be made prior to final approval of the proposed projects for inclusion in the budget and capital plan.
- 8. Denver Water's Treasury Section will monitor the marketplace and stay abreast of new types of financing instruments and sources of funds. In evaluating the appropriateness of various financing sources for specific projects, Denver Water will consider the expected life of the asset, the nature of covenants, the impact on the organization's future financial flexibility, the amount of uncertainty and market risk associated with the type of financing being considered, the current regulatory and economic environment and whether revenue and expense projections indicate that Denver Water will be able to support the projected level of debt.
- 9. Denver Water desires to maintain its stand-alone revenue bond rating at a level or of AA or better. After consulting with the rating agencies, Denver Water understands that maintaining its actual and historical level of debt service coverage rate of 2.2x or better will be important to maintaining the rating. Merely meeting the covenants contained in the bond resolution is not expected to be adequate. For that reason, the following, more stringent guidelines will be used in financial planning activities:
  - a. The Debt Ratio should not exceed 40%.
  - b. Interest Coverage (excluding System Development charges) should be equal to or greater than 2.5x
  - c. Debt Service Coverage, as defined in the Bond Resolution should be equal to or greater than 2.2x
  - d. The year-end balance in the Water Works Fund, net of Principal and Interest Requirements for the next 12 months should be equal to or greater than \$5 million.

#### **Calculations**

Debt Ratio - Total Debt divided by the sum of net fixed assets plus net working capital.

Interest Coverage - Net Revenues divided by Interest Requirements

Debt Service Coverage - Net Revenues divided by scheduled principal and interest payments, before any refunding, for the same 12 month period.

#### **Outstanding Debt and Obligations under Capital Leases**

At year end 2003, the Board had \$283.5 million par amount of bonds outstanding, \$59.1 million par amount of COPs with coupon rates between 4.0% and 5.5% and a present value obligation under other capital leases of \$29.5 million.

Of the \$283.5 million par amount of bonds outstanding, \$156.3 million or 55% consisted of general obligation bonds with coupon rates between 2.0% and 6.0%. The balance of \$127.2 million or 45% consisted of water revenue bonds with coupon rates between 2.5% and 5.0%. As discussed above, the Board expects that the percentage of water revenue bonds will increase slowly to 100% as the general obligations mature. Because many of the outstanding bonds were issued at a premium or discount to current rates, it can at times be informative to look at the market value of outstanding bonds as well as the par amount. At year end 2003, the market value of the bond outstanding was \$305.8 million of which \$171.6 million or 56% were GO bonds and \$134.8 million or 44% were water revenue bonds.

A schedule of outstanding debt and obligations under capital leases appears on page 93.

#### **Payment Schedule**

The Board's debt guidelines provide that the year end balance in the water works fund should exceed the amount needed to service its outstanding debt and meet all obligations under capital leases during the following year by at least \$5 million. The Board has been in compliance with this guideline each year since it was first adopted in December 1995. The total payment obligations for the years 2004 – 2008 are as follows:

2004	\$38.146 million
2005	\$42.376 million
2006	\$42.308 million
2007	\$45.646 million
2008	\$42.511 million

With the current payment schedule, 35.2% of the principal amount of outstanding bonds and capital lease obligations will be retired by the end of 2008, 67.0% by the end of 2013 and 85.9% will be retired by the end of 2018. The final maturity of all outstanding bonds and capital lease obligations occurs on October 1, 2029.

### Calculation of Ratios Pro-forma Comparison with Debt Guidelines Adopted in 2003 (Thousands of Dollars

				As of	2004
Debt Ratio	2000	2001	2002	9/23/2003	Budget
Par amount of debt outstanding	292,255	307,454	299,606	376,671	351,696
Divided by: Sum of Net Fixed Assets and Net Working Capital	1,275,359	1,338,825	1,392,418	1,521,279	1,309,379
Debt Ratio	23%	23%	22%	25%	27%
Target: Less than or equal to 40%					
Debt Service Coverage					
Net revenues	106,216	111,747	100,598	73,091	97,497
Additional amount needed for rate covenant	_	-	-	-	_
Sum	106,216	111,747	100,598	73,091	97,497
Divided by: Scheduled Debt Service - year just ended	34,778	31,208	32,523	32,007	38,147
Debt Service Coverage	3.05	3.58	3.09	2.28	2.56
Target: Greater than or equal to 2.2x					
Interest Coverage Excluding SDC					
Net Revenues	106,216	111,747	100,598	73,091	97,497
Less: System Development Charges	(25,257)	(22,420)	(35,675)	(13,850)	(22,259)
Net Revenues Less SDC's	80,959	89,327	64,923	59,241	75,238
Divided by: Interest Requirements next 12 months	15,719	15,781	16,333	16,901	17,182
Interest Coverage	5.2	5.7	4.0	3.5	4.4
Target: Greater than or equal to 2.5x					
Year-end Balance in WWF after Next Year's Debt Service Requirements					
Year-end Balance in WWF	172,400	193,105	161,537	230,915	146,125
Less: Principal and Interest Requirements-next 12 months	(31,208)	(32,523)	(17,345)	(25,831)	(42,377)
Net Balance	141,192	160,582	144,192	205,084	103,748

### Schedule of Payments Due on Outstanding Debt and Obligations Under Capital Leases (Thousands of Dollars)

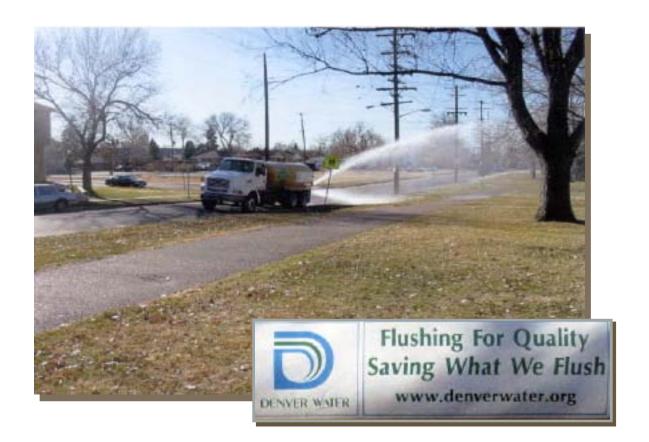
	2004	2005	2006	2007	2008 2	2009-2013	2014-2018	2019-2023	2024-2028	2029+	Total
Principal											
GO	7,465	16,490	13,345	24,100	21,935	47,805	11,290	2,365	-	11,550	156,345
REV	6,445	2,815	6,780	200	200	34,675	41,740	34,300			127,155
COPs	4,605	4,800	5,005	5,235	5,710	27,775	6,030				59,160
Wolford	1,020	1,090	1,165	1,245	1,330	8,154	11,364	4,213			29,581
Total Principal	19,535	25,195	26,295	30,780	29,175	118,409	70,424	40,878	-	11,550	372,241
As Percentage of total	5.2%	6.8%	7.1%	8.3%	7.8%	31.8%	18.9%	11.0%	0.0%	3.1%	100.0%
Cumulative %	5.2%	12.0%	19.1%	27.3%	35.2%	67.0%	85.9%	96.9%	96.9%	100.0%	
Interest											
GO	7,578	7,259	6,458	5,813	4,616	11,941	4,785	3,532	3,234	647	55,863
REV	6,324	5,479	5,394	5,189	5,183	22,377	13,020	5,198			68,164
COPs	2,729	2,534	2,327	2,110	1,868	4,939	603				17,110
Wolford	1,980	1,910	1,835	1,755	1,670	6,846	3,636	287			19,919
Total Interest	18,611	17,182	16,014	14,867	13,337	46,103	22,044	9,017	3,234	647	161,056
Total Due											
GO	15,043	23,749	19,803	29,913	26,551	59,746	16,075	5,897	3,234	12,197	212,208
REV	12,769	8,294	12,174	5,389	5,383	57,052	54,760	39,498	-	-	195,319
COPs	7,334	7,334	7,332	7,345	7,578	32,714	6,633	-	-	-	76,270
Wolford	3,000	3,000	3,000	3,000	3,000	15,000	15,000	4,500	-	-	49,500
Total Payments Scheduled	38,146	42,377	42,309	45,647	42,512	164,512	92,468	49,895	3,234	12,197	533,297

#### DENVER WATER DEPARTMENT SCHEULE OF OUTSTANDING BONDS AND OBLIGATIONS UNDER CAPITAL LEASES December 31. 2003

DATE	MATURITY VALUE	COUPON RATE	DOLLARS OF INTEREST	TOTAL PRINCIPAL	TOTAL INTEREST
General Obligation Bonds	-		-		-
Series 1995 - Callable on 10/	1/05 @ 100.0				
10/1/04	1,185,000.00	5.000%	59,250.00		
10/1/05	1,200,000.00	5.000%	60,000.00		
10/1/10	6,000,000.00	5.000%	300,000.00	8,385,000.00	419,250.00
Series 1996 - Callable on 10/	1/06 @ 100.0				
10/1/04	1,130,000.00	4.900%	55,370.00		
10/1/05	1,185,000.00	5.000%	59,250.00		
10/1/06	1,245,000.00	5.000%	62,250.00		
10/1/07	1,285,000.00	5.100%	65,535.00		
10/1/08	1,415,000.00	5.200%	73,580.00		
10/1/09	1,460,000.00	5.300%	77,380.00		
10/1/10	1,540,000.00	5.375%	82,775.00		
10/1/11	1,630,000.00	5.375%	87,612.50	10,890,000.00	563,752.50
Series 1997 - Callable on 10/	1/07 @ 100 0				
10/1/04	1,250,000.00	4.550%	56,875.00		
10/1/05	1,330,000.00	4.600%	61,180.00		
10/1/06	1,400,000.00	4.650%	65,100.00		
10/1/07	1,550,000.00	5.500%	85,250.00		
10/1/08	1,700,000.00	4.800%	81,600.00		
			98,000.00		
10/1/09	2,000,000.00	4.900%	,		
10/1/10	2,500,000.00	5.050%	126,250.00		
10/1/11	2,800,000.00	5.100%	142,800.00	17 100 000 00	000 405 00
10/1/12	2,900,000.00	5.150%	149,350.00	17,430,000.00	866,405.00
Series 1999 - Callable on 10/	_				
10/1/10	1,820,000.00	6.000%	109,200.00		
10/1/11	660,000.00	5.500%	36,300.00		
10/1/13	500,000.00	5.500%	27,500.00		
10/1/29	11,550,000.00	5.600%	646,800.00	14,530,000.00	819,800.00
Series 2000 - Callable on 10/	1/11 @ 100.0				
10/1/11	2,290,000.00	5.500%	125,950.00		
10/1/12	2,410,000.00	4.800%	115,680.00		
10/1/13	2,530,000.00	4.875%	123,337.50		
10/1/14	2,665,000.00	5.000%	133,250.00		
10/1/15	2,805,000.00	5.000%	140,250.00	12,700,000.00	638,467.50
Series 2001A - Callable on 9/	1/11 @ 100.0				
9/1/04	615,000.00	4.000%	24,600.00		
9/1/05	640,000.00	4.000%	25,600.00		
9/1/06	645,000.00	4.000%	25,800.00		
9/1/07	670,000.00	4.000%	26,800.00		
9/1/08	700,000.00	4.000%	28,000.00		
9/1/09	730,000.00	4.000%	29,200.00		
9/1/10	760,000.00	4.125%	31,350.00		
9/1/11	795,000.00	4.200%	33,390.00		
9/1/12	830,000.00	4.300%	35,690.00		
9/1/13	700,000.00	4.400%	30,800.00		
9/1/13	900,000.00	4.500%	40,500.00		
9/1/15	980,000.00	4.600%	45,080.00		
9/1/16				0 865 000 00	410 110 00
9/ 1/ 10	900,000.00	4.700%	42,300.00	9,865,000.00	419,110.00

DATE	MATURITY VALUE	COUPON RATE	DOLLARS OF INTEREST	TOTAL PRINCIPAL	TOTAL INTEREST
General Obligation Bonds Co	ontinued				
Series 2001B Not subject to	optional redemption prior to maturity	,			
9/1/04	2,865,000.00	4.000%	114,600.00		
9/1/05	11,705,000.00	5.000%	585,250.00		
9/1/06	9,615,000.00	5.000%	480,750.00		
9/1/07	20,145,000.00	5.000%	1,007,250.00		
9/1/08	17,655,000.00	5.000%	882,750.00	72 225 000 00	2 494 200 00
9/1/09	10,340,000.00	4.000%	413,600.00	72,325,000.00	3,484,200.00
Series 2002 - Callable on 10/1/	/12 @ 100.0				
10/1/04	420,000.00	2.000%	8,400.00		
10/1/05	430,000.00	2.250%	9,675.00		
10/1/06	440,000.00	2.500%	11,000.00		
10/1/07	450,000.00	2.750%	12,375.00		
10/1/08	465,000.00	3.000%	13,950.00		
10/1/09	485,000.00	3.125%	15,156.25		
10/1/10	500,000.00	3.250%	16,250.00		
10/1/11	520,000.00	3.500%	18,200.00		
10/1/12	540,000.00	3.500%	18,900.00		
10/1/13	565,000.00	3.500%	19,775.00		
10/1/14	590,000.00	3.700%	21,830.00		
10/1/15	615,000.00	3.875%	23,831.25		
10/1/16	640,000.00	4.000%	25,600.00		
10/1/17	670,000.00	4.000%	26,800.00		
10/1/18	525,000.00	4.100%	21,525.00		
10/1/19	515,000.00	4.200%	21,630.00		
10/1/19	190,000.00	4.300%	8,170.00		
10/1/21	810,000.00	4.400%			
10/1/21	850,000.00	4.500%	35,640.00 38,250.00	10,220,000.00	366,957.50
10/1/22	000,000.00	4.00070	00,200.00	10,220,000.00	000,007.00
Sub-total GO Bonds	156,345,000.00		7,577,942.50	156,345,000.00	7,577,942.50
Weighted Average Coupon R	Rate - GO Bonds	4.847%			
Revenue Bonds					
Series 2003A - Callable on 6/1		4.0000/	4 000 00		
12/1/04	100,000.00	4.000%	4,000.00		
12/1/05	100,000.00	4.000%	4,000.00		
12/1/06	100,000.00	4.000%	4,000.00		
12/1/07	100,000.00	4.000%	4,000.00		
12/1/08	100,000.00	4.000%	4,000.00		
12/1/09	100,000.00	2.500%	2,500.00		
12/1/10	100,000.00	2.750%	2,750.00		
12/1/11	200,000.00	3.000%	6,000.00		
12/1/12	1,000,000.00	5.000%	50,000.00		
12/1/13	1,145,000.00	5.000%	57,250.00		
12/1/14	1,540,000.00	3.500%	53,900.00		
12/1/15	1,550,000.00	3.500%	54,250.00		
12/1/16	2,110,000.00	4.000%	84,400.00		
12/1/17	3,570,000.00	4.750%	169,575.00		
12/1/18	3,885,000.00	4.750%	184,537.50		
12/1/19	4,110,000.00	4.750%	195,225.00		
12/1/20	6,160,000.00	4.750%	292,600.00		
12/1/21	7,355,000.00	4.750%	349,362.50		
12/1/22	7,720,000.00	4.750%	366,700.00		
12/1/23	8,955,000.00	4.250%	380,587.50	50,000,000.00	2,269,637.50

DATE	MATURITY VALUE	COUPON RATE	DOLLARS OF INTEREST	TOTAL PRINCIPAL	TOTAL INTEREST
Revenue Bonds Continued					
Series 2003B - Callable on 6/1/13 @	0 100.0				
12/1/04	6,345,000.00	4.000%	253,800.00		
12/1/05	2,715,000.00	3.000%	81,450.00		
12/1/06	6,680,000.00	3.000%	200,400.00		
12/1/07	100,000.00	2.500%	2,500.00		
12/1/08	100,000.00	5.000%	5,000.00		
12/1/09					
	7,830,000.00	5.000%	391,500.00		
12/1/10	10,725,000.00	5.000%	536,250.00		
12/1/11	400,000.00	3.750%	15,000.00		
12/1/12	5,150,000.00	4.000%	206,000.00		
12/1/13	8,025,000.00	4.000%	321,000.00		
12/1/14	8,400,000.00	5.000%	420,000.00		
12/1/15	8,825,000.00	5.000%	441,250.00		
12/1/16	11,860,000.00	5.000%	593,000.00	77,155,000.00	3,467,150.0
Sub-total Revenue Bonds	127,155,000.00		5,736,787.50	127,155,000.00	5,736,787.50
Weighted Average Coupon Rate -	Revenue Bonds	4.512%			
Sub-total Bonds	283,500,000.00		13,314,730.00	283,500,000.00	13,314,730.00
Weighted Average Coupon Rate -	Bonds	4.697%	·	·	
Certificates of Participation					
1998 Lease Purchase Certificates -	Not subject to optional rede	mption prior to maturi	ity		
11/15/04	2,155,000.00	4.500%	96,975.00		
11/15/05	2,250,000.00	4.100%	92,250.00		
11/15/06	2,340,000.00	4.150%	97,110.00		
11/15/07	2,450,000.00	4.200%	102,900.00		
11/15/08	4,230,000.00	4.250%	179,775.00		
11/15/09	4,430,000.00	4.300%	190,490.00		
11/15/10 11/15/11	4,605,000.00 750,000.00	4.400% 5.000%	202,620.00 37,500.00	23,210,000.00	999,620.00
2001 Lease Purchase Certificates -	Callable on 11/15/11 @ 100	10			
11/15/04	_	4.000%	09 000 00		
	2,450,000.00		98,000.00		
11/15/05	2,550,000.00	4.500%	114,750.00		
11/15/06	2,665,000.00	4.500%	119,925.00		
11/15/07	2,785,000.00	5.000%	139,250.00		
11/15/08	1,480,000.00	4.000%	59,200.00		
11/15/09	1,540,000.00	4.000%	61,600.00		
11/15/10	1,600,000.00	4.125%	66,000.00		
11/15/11	11,255,000.00	5.500%	619,025.00		
11/15/12	1,760,000.00	4.375%	77,000.00		
11/15/13	1,835,000.00	4.500%	82,575.00		
11/15/14	1,920,000.00	4.500%	86,400.00		
444545		<b>5</b> 0000/	400.050.00		
11/15/15 11/15/16	2,005,000.00 2,105,000.00	5.000% 5.000%	100,250.00 105,250.00	35,950,000.00	1,729,225.00
Sub-total COPs	59,160,000.00		2,728,845.00	59,160,000.00	2,728,845.00
Weighted Average Coupon Rate -		4.613%	2,: 20,070.00	00,100,000.00	2,720,043.00
Capital Lease	COPS	4.013 //			
Wolford Mountain Lease - Not sub	eject to prepayment				
Outstanding as of 12/31/03	29,581,486.26	6.750%	1,996,750.32	29,581,486.26	1,996,750.3
GRAND TOTAL BONDS &	-,,		,	-,,	,,.
CAPITAL LEASE					
OBLIGATIONS \$	372,241,486.26	\$	18,040,325.32 \$	372,241,486.26 \$	18,040,325.32
Weighted Average Coupon Rate -	All	4.846%			



Prudent maintenance of Denver Water infrastructure calls for periodic purging of fire hydrants to assure their continued ability to function in emergencies, and to flush out distribution lines to assure proper water quality. Managing through the drought, Denver Water workers captured purged water and spread it on thirsty public landscaping during the summer of 2003.

#### Denver Water: Setting the Example in Water Conservation

The ongoing drought requires the efforts of everyone to conserve water. Denver Water is no exception. The following are only a few examples of steps Denver Water has taken to be a responsible steward, and consumer, of Denver's water supply:

- Ten Denver Water facilities have been Xeriscaped, including the Administration Building, Moffat and Marston Treatment Plants; Hillcrest Pump Station and Reservoir, Highlands Pump Station and Reservoir, Lone Tree, 56<sup>th</sup> Avenue, and 64<sup>th</sup> Avenue Pump Stations; Colorow Reservoir, and the vault entrance at S. Colorado Blvd. and E. Yale Ave. These Xeriscapes save an average of 45 acre feet of water per year compared to typical Bluegrass water requirements.
- Denver Water has installed rainfall sensors on several of its irrigation systems, enabling it to match irrigation requirements to weather conditions. Rainfall sensors, also known as ET driven controls, have been installed at the Administration Building, Moffat, Marston and Foothills Treatment Plants; Chatfield Reservoir, the Kassler Center, 56<sup>th</sup> Ave. Pump Station, Ashland Decentralization Station, Capitol Hill Reservoir, and Einfeldt and Kendrick Pump Stations.
- Denver Water's Administration Complex has a new car wash for its vehicles that recycles most of its water. Potable water is used only in the final rinse. This car wash uses much less water than the typical car wash in Denver.
- Denver Water minimizes water use in its cooling tower at the Administration Building by careful chemical addition which allows water to be recycled several times. Based on Cooling Tower Audits performed throughout the Denver Area, it is among the most efficiently operated.
- Low-flow showerheads have been installed in all Denver Water employee shower rooms. Most sink faucets are low-flow; many have automatic turn-off features.

#### Section 7 - Designated Balance

#### **Designated Balance Summary**

2004 began with an actual Designated Balance of \$163,405,000. The budget projects this amount to be increased during 2004 by receipts of \$209,893,000 and decreased by expenditures of \$227,596,000, resulting in a total 2004 Ending Balance of \$145,702,000.

- 1. The Designated Balance for system operations and capital for each year reflect the following factors: Three months of the next year's operation and maintenance.
- 2. 50% of the next year's non-expansion capital (normal replacements and improvements).
- 3. One year of debt service.
- 4. Self-Insurance continuing at 5% of the next year's operating receipts.
- 5. Future Capital consisting of the difference between the total designated balance and the total of amounts for operation and maintenance, non-expansion capital, debt service and self-insurance contingencies.
- 6. Temporary drought and tap surcharges to encourage water conservation during drought conditions.
- 7. Grants to help mitigate the costs of repairing the area around Cheesman Reservoir affected by the 2002 Hayman fire.

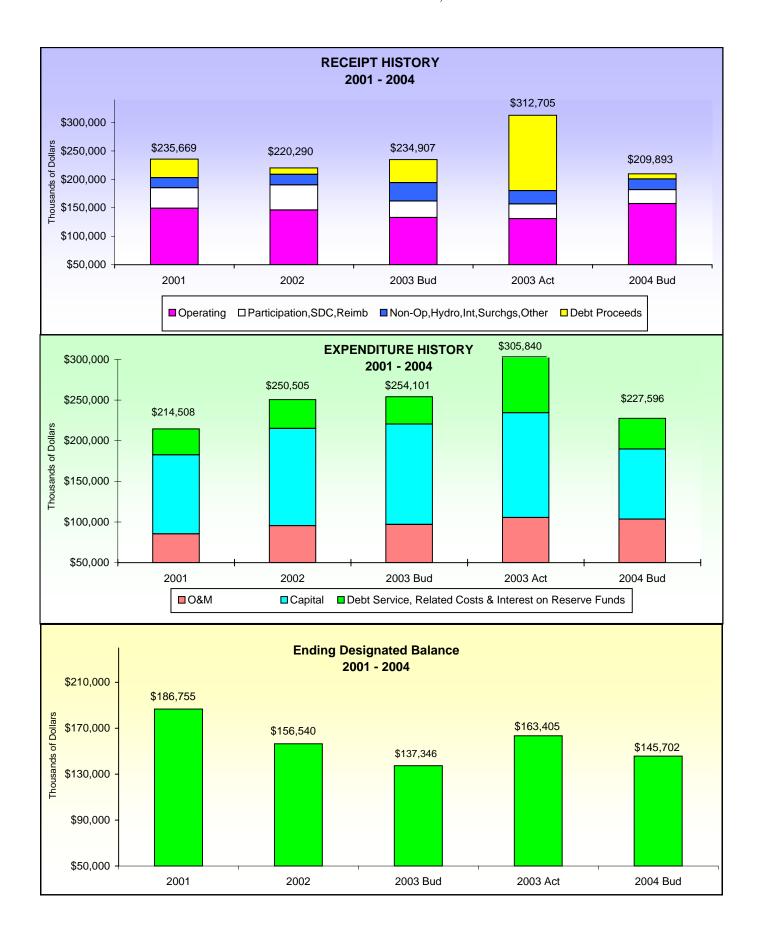
#### Designated Balance 2001 - 2004 (Thousands of dollars)

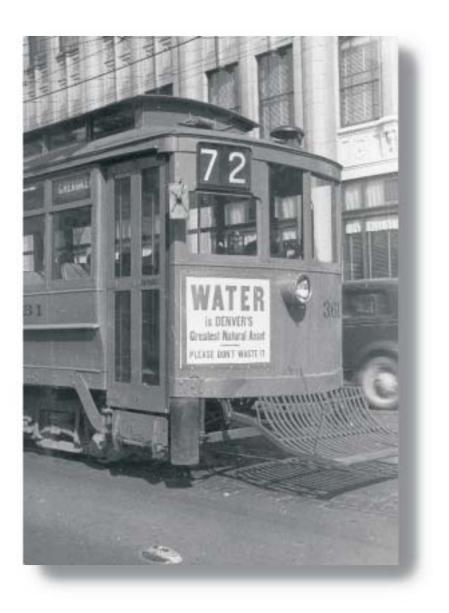
Operation & Maintenance (3 months, next year)	2001 Actual 26,541	\$ 2002 Actual 27,007	\$ 2003 Budget 29,145	\$	2003 Actual 28,611	\$	2004 Budget 29,001
Non-expansion Capital (50% of normal replacements and improvements, next year)	13,831	10,607	13,553		14,504		15,123
Debt Service (1 year, next year)	35,194	70,853	41,773		38,146		42,376
Self Insurance (5% of Operating Receipts, next year)	7,311	6,653	6,958		7,873		8,232
Future Capital: Supply Water Treatment Transmission & Distribution Other	41,522 47,454 9,886 5,016	22,598 14,689 376 1,113	16,977 2,899 828 7,249		50,382 8,997 600 2,369		37,703 3,813 847 8,607
Drought : Drought Surcharge Tap Surcharge	0 0	776 1,333	11,043 4,538		8,001 1,641		0
Hayman Fire Repair Grants: NRCS Grant from USDA (70% of est \$3.8 million of costs between Sept 16, 2002 through April 23, 2003.	0	535	1,883		2,108		0
EPA Section 319 Grant (60% match of est \$833,333 cost for revegetation	0	 0	 500	. <u>-</u>	173	_	0
Total Designated Balance	186,755	\$ 156,540	\$ 137,346	\$	163,405	\$_	145,702

# Comparison of Receipts and Expenditures 2001 - 2004

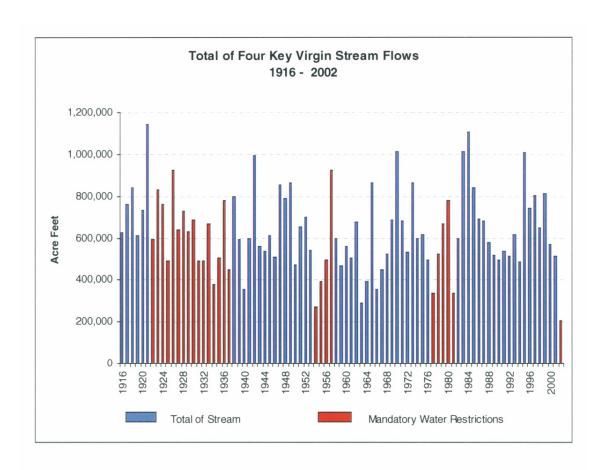
(Thousands of Dollars)

		2001 Actual		2002 Actual		2003 Budget		2003 Actual		2004 Budget
Beginning Designated Balance	\$	165,594	\$	186,755	\$	156,540	\$	156,540	\$	163,405
Receipts:										
Operating	\$	149,188	\$	146,210	\$	133,065	\$	131,038	\$	157,450
Drought Surcharge		0		776		11,043		8,001		0
Non-Operating		3,102		3,169		2,811		3,154		3,016
Hydropower		1,904		1,456		988		1,402		1,706
System Development Charges		22,259		36,644		23,783		19,649		22,034
Tap Surcharge		0		1,333		4,538		1,641		0
Participation		7,034		5,573		2,115		2,835		2,036
Reimbursements & Grants		6,802		2,052		3,123		3,420		494
Interest on Investments		9,522		8,459		4,486		4,879		4,297
Other		3,200		3,225		8,455		4,248		9,860
Subtotal Receipts	\$	203,011	\$	208,897	\$	194,407	\$	180,267	\$	200,893
Debt Proceeds		32,658	_	11,393	_	40,500	_	132,438	_	9,000
Total Receipts	\$	235,669	\$_	220,290	\$_	234,907	\$_	312,705	\$_	209,893
Expenditures:										
Operation & Maintenance Programs	:									
Raw Water	\$	13,576	\$	17,550	\$	14,080	\$	15,603	\$	14,089
Recycled Water		0		300		1,746		1,153		4,528
Water Treatment		17,894		18,083		18,170		20,369		21,144
Delivery		41,355		44,462		50,454		54,724		50,216
General Plant	_	12,550	_	15,058	_	12,556		13,614	_	13,606
Total Operation &										
Maintenance Expenditures	\$	85,375	\$_	95,453	\$_	97,006	\$_	105,463	\$_	103,583
Capital Programs:										
Raw Water	\$	10,721	\$	15,341	\$	18,371	\$	19,918	\$	16,456
Recycled Water		15,908		31,467		54,898		54,689		17,010
Water Treatment		29,527		27,330		14,682		15,326		4,789
Delivery		29,735		30,724		32,177		31,187		34,718
General Plant		11,462		14,932		11,337		7,919		18,119
Historical Timing Adjustment		0		0		(8,000)		0		(4,957)
Total Capital Expenditures	\$	97,353	\$	119,794	\$	123,465	\$	129,039	\$	86,135
Debt Service, Related Costs and	\$	31,780	\$_	35,258	\$_	33,630	\$_	71,338	\$_	37,878
Interest on Reserve Funds	•		_		_		_		_	
Total Expenditures	\$	214,508	\$_	250,505	\$_	254,101	\$_	305,840	\$_	227,596
Ending Designated Balance	\$	186,755	\$_	156,540	\$_	137,346	\$_	163,405	\$_	145,702





Denver Water's promotion of water conservation in the semi-arid Mile High City has been ongoing since the early 1900s, as evidenced by this 1930s-era street car advertisement. Similarly, a 1922 open letter to Denver citizens from the "Water Department" noted that water for household, fire protection, manufacturing and business purposes was considered of "first importance," while water for sewer flushing, irrigation of lawns and parks and street sprinkling was "second." "All good citizens will condemn the waste of water and should cooperate with the Water Department to prevent waste," the letter said. Water restrictions were imposed continuously from 1922 to 1937.



#### Mother Nature, the ultimate water provider, determines water restrictions.

Virgin stream flows — calculated as if there were no man-made structures to divert or collect water from a stream — ultimately are reflective of Mother Nature's control of the climate. In periods of drought, stream flows are lower than normal, causing water providers such as Denver Water to impose water restrictions.

The graph above shows the total of four "virgin" stream flows, as recorded at gauges at the Dillon Reservoir inflow, the Fraser River near Winter Park, the Willams Fork River near Leal, and the South Platte River at South Platte. Periods of drought and resulting low average stream flows are identified as years 1922-1937, 1954-1957, 1977-1981 and 2002. In each period, water restrictions were imposed by Denver Water. When Mother Nature speaks, everyone listens.

### **Section 8 - Glossary of Terms**

#### **Acronyms**

AF

Acre Foot

**AMWA** 

Association of Metropolitan Water Agencies

**AWWA** 

American Water Works Association

COP

Certificate of Participation

CIS

**Customer Information System** 

**CWA** 

Clean Water Act

DIA

**Denver International Airport** 

DW

Denver Water

**EPA** 

**Environmental Protection Agency** 

**ERT** 

**Encoder Receiver Transmitter** 

**GAD** 

Gallons per Account per Day

**GIS** 

Geographic Information System

G. O. Bonds

**General Obligation Bonds** 

**IRP** 

Integrated Resource Planning

MGD

Millions of Gallons per Day

**NRCS** 

**Natural Resources Conservation Services** 

**NWRS** 

National Water Resource Association

**RCRA** 

Resource Conservation and Recovery Act

**WUWC** 

Western Urban Water Coalition

#### **Definitions**

#### **Annual Yield**

Maximum basic demand the water supply could meet throughout a period of historical or synthesized hydrological conditions.

#### **Bonds**

Debt instruments issued by a state or local government. According to the Charter, the Board may issue revenue bonds which are secured solely by it's revenue. In the past it was able to issue general obligation bonds that were secured by the full faith and credit of the City of Denver.

#### **Booked**

Accrual method of accounting in which expenses are recognized when the liability is incurred.

#### **Budget**

A financial plan for a specified period of time (fiscal year) that assigns resources to each activity in sufficient amounts so as to reasonably expect accomplishment of the objectives in the most cost effective manner.

#### **Capital Work Plan**

A category of Master Plan items that are considered to be of a capital nature. Includes projects having a depreciation life of over one year and tends to benefit future periods, or has the effect of increasing the capacity, efficiency span of life or economy of an existing fixed asset. Example: the construction of a new conduit.

#### **Capital Leases**

A lease having essentially the same economic consequences as if the lessee had secured a loan and purchased the leased asset.

#### **Casual Employee**

An employee who works on an intermittent basis as a summer employee or during other brief periods.

#### **Certificate of Participation**

Evidence of assignment of proportionate interests in rights to receive certain revenues pursuant to a lease purchase agreement.

#### **Chart of Accounts**

Listing of account numbers and their descriptions.

#### **Contract Payments**

Consists of contract payments for construction, materials purchased for contractor installation, acquisition of land and land rights and water rights.

#### **Corporate Culture**

Values that set a pattern for a company's activities, opinions and actions.

#### **Cost Control Center**

A term used to denote a responsibility center. It is an organizational unit that has been placed in charge of accomplishing certain specified tasks. Example: Water Control Section.

#### **Customer Information System**

A computer system that tracks and bills customer's water consumption

#### **Customer Taps**

A physical connection to a distribution main that, together with appropriate license affects water service to a licensed premise.

#### **Debt Guidelines**

A statement from the Board with respect to appropriate uses of external financing.

#### **Debt Service**

Principal and interest on debt and payment under capital leases.

#### **Demand Side Management**

Term used when rebates are given when a facility can reduce power consumption.

#### **Designated Balance**

The beginning and ending balance of the Water Works Fund are classified or designated into two categories for presentation purposes; the portion related to the Land Sales Account and the remainder that is available for System Operations and Capital purposes.

#### **Direct Materials**

Includes materials and supplies purchased for direct use and fuel and oil for vehicles and equipment (non-stores issues only).

#### **Disbursements**

Money paid out for expenses, liabilities or assets.

#### **Discretionary Employee**

The charter of the City and County of Denver allows the Board to establish a classification of employees who have "executive discretion", who shall number no more than 2% of all persons employed, and shall serve solely at the pleasure of the Board.

#### **Diversity Training**

Objective of providing skills for managing and working with people of all races, genders and cultures.

#### **Division**

Largest organizational unit reporting to the Manager.

#### **Employee Benefits**

Employee Benefits are expenditures paid by Denver Water for Worker's Compensation, Social Security, Retirement, Employee Assistance Program, Health and other insurances. It does not include employee withholdings or unemployment insurance.

#### **Endangered Species Act**

The federal law that sets forth how the United States will protect and recover animal and plant species whose populations are in dangerous decline or close to extinction. The law protects not only threatened and endangered species but also the habitat upon which species depend.

#### **Enterprise Fund**

A type of propriety fund or a governmental unit that carries on activities in a manner similar to a private business.

#### **EPA Section 319**

Environmental Protection Agency Program to provide funds to agencies to assist in clean water protection.

#### **Encoder Receiver Transmitter (ERT)**

An electronic device that receives a signal from a water meter, encodes the current reading into a digital signal, and transmits it to a meter reader

#### **Federal Statutes**

Statutes enacted by Congress relating to matters within authority delegated to federal government by the U.S. Constitution.

#### **Fund**

An accounting entity with a set of self-balancing accounts that is used to account for financial transactions for specific activities of government functions.

#### **General Equipment**

Computer equipment, office furniture and equipment, transportation equipment, storehouse equipment, construction and maintenance tools and equipment, chemical laboratory equipment, power operated equipment, communication equipment, garage and shops equipment and miscellaneous equipment.

#### **General Obligation Bonds (GO Bonds)**

A security representing the promise to repay borrowed money secured by the full faith and credit of the governmental borrower.

#### Goals

Overall end toward which effort is directed.

#### **Governmental Accounting Standards Board (GASB)**

A board which establishes the generally accepted accounting principles for state and local governmental units.

#### **Gross Revenue**

All income and revenues, from whatever source, including system development charges and participation payments, excluding only moneys borrowed and used for providing capital improvements or other receipts legally restricted to capital expenditures.

#### **Historical Timing Adjustment**

Estimate of budget variances primarily due to changes in capital construction schedules and the timing of obtaining permits and acquiring rights-of-way.

#### Hydropower

Hydroelectric power of/or relating to production of electricity by water power.

#### **Interest Requirements**

As used in the debt guidelines, scheduled interest payments during the 12 month period following the date of calculation.

#### Infill

Undeveloped areas within the combined service area that Denver Water would be expected to serve in the future.

#### **Integrated Resource Planning (IRP)**

A method for looking ahead using environmental, engineering, social, financial and economic considerations; includes using the same criteria to evaluate both supply and demand options while involving customers and other stakeholders in the process.

#### **Introductory Employee**

An employee who is newly appointed to a position and is serving an introductory period, generally of six month's duration.

#### **Lease Payments**

Periodic payments made in order to obtain use of a facility or piece of equipment.

#### **Long-Term Debt**

Debt with a maturity of more than one year from date reported.

#### **Master Plan**

Expenditures identified by projects and activities that are necessary to accomplish the Department's overall operating goals and objectives. The Master Plan, or Program Budget, is divided into a Capital Work Plan and an O&M Work Plan.

#### **Master Plan Item**

A specific activity or project that is identified in the Master Plan.

#### **Modified Accrual Basis**

Accounting method in which expenditures are reported and budgeted "as booked". The difference between expenditures "as booked" and disbursed is adjusted to determine the ending cash and investment balance amounts.

#### **Municipal Water Utilities**

Public entities whose responsibility is to deliver water to the customers.

#### **Net Revenues**

Gross Revenue less Operating and Maintenance Expenses.

#### **Non-Operating Revenue**

As used in this document, revenue received from payments for services such as main inspections, installation of taps, calculating and mailing of sewer bills and other such services.

#### Non-Potable

Water not suitable for drinking. (See also Potable)

#### **Objectives**

Something toward which effort is directed - an aim, goal or end of action.

#### **Operating Reserves and Restricted Funds**

The amount of cash and invested funds available at any point in time. The balance is the Water Works Fund as defined in this glossary.

#### **Operating Revenue**

Revenue obtained from the sale of water.

#### Operation and Maintenance (O&M) Work Plan

A category of Master Plan items not capital in nature, that are normally ongoing activities and pertain to the general operations of Denver Water.

#### Other

Expenditures for items such as payroll deductions, sales tax, insurance claims, cash over and short, and budget adjustments.

#### Other Services

Expenditures for items such as training, employee expenses, rents and leases, ditch assessments, convention and conference expenses, subscriptions, maintenance and repair agreements and memberships.

#### **Participation Agreement**

An agreement in which a distributor or developer pays for the cost of the distribution facilities such as conduits, treated water reservoirs or pump stations required to provide service within that district from the nearest existing available source.

#### **Potable**

Water that does not contain pollution, contamination, objectionable minerals or infective agents and is considered safe for domestic consumption; drinkable. (See also Nonpotable)

#### **Principal and Interest Requirements**

As used in the debt guidelines, interest requirements plus the current portion of long-term debt. (Includes general obligation bonds, certificates of participation, and capital leases.)

#### **Professional Services**

Consists of consultant payments for such activities as facility design, legal work and auditors.

#### **Program**

An organized group of activities and the resources to carry them out, aimed at achieving related goals.

#### **Program Budget**

A method of budgeting in which the focus is on the project and activities that are required to accomplish Denver Water's mission, goals and objectives. It provides for consideration of alternative means to accomplish these criteria. It also provides a control device for higher level management and cuts across organizational lines. Resources are allocated along program lines and across organizational lines.

#### **Program Element**

Series of smaller categories of activities contained in the program such as raw water, water treatment, etc.

#### **Project Employee**

A contract worker assigned to a project of more than one year's duration and receiving a limited benefits package.

#### Refunds

Includes System Development Charge Refunds and Customer Refunds.

#### **Regular Employee**

An employee who has satisfactorily completed an introductory period and has been approved by the Board to receive the rights and privileges of a tenured employee.

#### **Regular Pay**

Includes all straight-time salaries and wages earned, leaves, tuition refunds, suggestion awards, swing and graveyard shift payrolls, and safety equipment allowances. Regular pay consists of all payroll items except for overtime pay.

#### Safe Drinking Water Act (SDWA)

Federal legislation passed in 1974 that regulates the treatment of water for human consumption and requires testing for and elimination of contaminants that might be present in the water.

#### Stores Issues

Includes materials and supplies issued from inventory and fuel and oil for vehicles and equipment (stores issues only).

#### Strategic Plan

Process that is a practical method used by organizations identifying goals and resources that are important to the long-term well being of its future.

#### **Streamline Pay**

Automatic deduction of bills from customers' checking accounts.

#### **System Development Charges**

A one-time connection charge that provides a means for financing a portion of the source of supply, raw water transmission facilities, treatment plants and backbone treated water transmission facilities required to provide service to a new customer. Sometimes called a tap fee.

#### **Temporary Employee**

An employee hired as an interim replacement or temporary supplement of the work force. Assignments in this category can be of limited duration or indefinite duration, but generally do not exceed one year.

#### **Type of Expenditure**

A classification of resources or commodities that will be budgeted and charged to projects and activities by Cost Control Centers.

#### **Utilities & Pumping**

Consists of gas, electric and telephone, electricity wheeling charges, replacement power purchased and power purchased for pumping.

#### **Water Conservation**

Obtaining the benefits of water more efficiently, resulting in reduced demand for water. Sometimes called "end-use efficiency" or "demand management."

#### **Water Revenues**

Revenues generated through billing process from the sale of water.

#### Waterworks Fund

A fund into which are placed all revenues received for the operation of the water works system and plant together with all monies coming into said fund from other sources. Denver Water is allowed by the City Charter to have only one fund, the Water Works Fund, for all of its receipts and expenditures. The balance of the Water Works Fund is referred to in this budget document as the Designated Balances, Capital and Land Sales Account.

## Fiscal Planning & Performance Staff, Divisional Budget Coordinators and Others Fiscal Planning & Performance Staff:

Ron Duncan
Antoinette Chavez
Tim Lowe
Marie Nieto
Marilyn Stwalley

#### **Divisional Budget Coordinators:**

Edith Carlson Manager and Staff
Alice Montez Human Resources
Susan Zimmerman Public Affairs/Finance

Pat Williams Legal

Marilyn Hampton Information Technology

Gary Aberle Engineering
Tom Clark Planning

Charlene Gregg Operations and Maintenance

#### **Fiscal Planning & Performance Information Services Support:**

Dean Flanders – Program Budget System
Jim Roper – Labor Budget System
Bob Tinglestad - Business Intelligence
James Hite - Business Intelligence
Delmer Delgado - Business Intelligence

#### **Graphics and Reproduction Staff:**

Kim Chapman Fran Lukachy Dorothy Keeble Samuel Smith

#### Denver Water - A Condensed History by :

J. Whitney Sibley III\* Community Affairs

Captions for the cover & tabs provided by J. Whitney Sibley III